

Anni Albers and Lilly Reich in Barcelona 1929: Weavings and Exhibition Spaces

The Bauhaus participated as an industry in the German section of the 1929 Barcelona International Exhibition, sending objects to the Palaces of Textile Industries and Decorative and Industrial Arts, two interiors (besides another thirteen) designed by Lilly Reich and Mies van der Rohe. The ground-breaking design for the Textile Industries exhibition space clearly contrasted with the architecture of the given neoclassical palace.

The exhibited Bauhaus objects were samples of drapery material, upholstery material, and wall-covering materials, the three types of utilitarian weavings Anni Albers elaborated at the Bauhaus weaving workshop, apart from her own artistic wall hangings. In the fall of 1929, after her visit to Barcelona, Albers would design an experimental wall-covering material for the Bundesschule Auditorium of Hannes Meyer's Federal School of the ADGB in Bernau. The original weaving had two different sides, one for acoustic absorption (made out of a straw-like synthetic material with chenille backing), the other for light reflection (of a silver finishing), which would grant Albers her Bauhaus degree in February 1930.

The goal of this paper is to set out the role played by Reich in the interior design of the exhibition spaces in Barcelona and to trace the origin of the material innovation of Albers's weavings.

Keywords: Anni Albers, Bauhaus, exhibitions, interiors, Lilly Reich, textiles

This paper examines the work of Anni Albers (1899–1994) to ascertain the impact that the visit to Barcelona International Exhibition during the summer of 1929 had on her later work. Albers was then a student of the Bauhaus weaving workshop and would graduate the following semester, in February 1930.¹ Lilly Reich (1885–1947) would not join the Bauhaus until 1932.² However, Reich's work in the interior designs of the vast German exhibits in Barcelona 1929 is echoed in a building that was collectively designed by the various Bauhaus workshops under the directorship of Hannes Meyer (1889–1954), and in which Albers participated, also in 1929.

Despite all that has been discussed in relation to the Barcelona International Exhibition, an important fact has remained undiscovered for scholarship in the fields of decorative arts, design history and material culture. In early 1929 the Bauhaus had already acquired many commitments to participate in several exhibitions throughout that year.³ Barcelona, together with Basel, Brussels, Leningrad and Paris, was one of the many cities outside Germany, where the Bauhaus was planning to display its objects. In fact, the Bauhaus participated as an industry in the German section of the 1929 Barcelona International Exhibition, sending objects to the Palace of Textile Industries (*Textilpalast*) and to the Palace of Decorative and Industrial Arts (*Gewerbepalast*).⁴

1 Anni Albers's Bauhaus diploma was signed in Dessau on February 4, 1930, by the Director Hannes Meyer and the Head of the Department Gunta Sharon-Stölzl. Box 29, Folder 2, Anni Albers Papers. The Josef and Anni Albers Foundation, Bethany, CT.

2 Mies van der Rohe offered Lilly Reich a position at the Bauhaus in Dessau a few months after he became its director in September 1930. Gunta Stölzl left the weaving department in September 1931, and Lilly Reich became the director of both the weaving studio and the building/finishing department in January 1932. See Magdalena Droste, "Lilly Reich: Her Career as an Artist," in Matilda McQuaid (ed.), *Lilly Reich: Designer and Architect* (New York: The Museum of Modern Art, 1996), 55.

3 On the first issue of the *Bauhaus* journal in 1929, the Bauhaus presence was noted on two lines, lost on a list with sixteen other exhibitions in which the school was taking part during that season. See "Ausstellungen," in *Bauhaus: Zeitschrift für Gestaltung* 3, no.1 (1929), 24.

4 Firma (company), Bauhaus Dessau, Dessau, Ebertallee, 12. Palacio (palace), Artes Decorativas e Industriales y [sic] Industrias Textiles. Box 47174, Expo 1929 Inventari Objetos de Artes. Exposición. Barcelona Extranjero y Estado. Listado de expositores, 4. Arxiu Contemporani, Exposición Internacional de 1929 (1923–1942), Barcelona. See also *Internationale Ausstellung Barcelona 1929: Deutsche Abteilung* (Reichsdr., 1929), 58 and 66.

As is already well known, most of the attention of the German presence in Barcelona went to the two pavilions that were built *ex-novo*, the renowned Representative Pavilion and also the German Electrical Industries Pavilion, both designed by Ludwig Mies van der Rohe (1886–1969). However, what it is less known is that another 16,287 m² were devoted to the exhibition of German industries in the fairgrounds of Montjuïc.⁵ Reich and Mies had been in charge of designing the German sections in parts of the interiors of eight separate neoclassical palaces: the Southern Palace on the top of the mountain; the Machine Palace (with sections for Electricity, Motive Force and Chemical Industries), the Palace of Projections, and the Palace of Communications and Transport, around the main avenue; the Palace of Textiles Industries and the Palace of Decorative and Industrial Arts to the eastern side; and the Palace of Graphic Arts and the Palace of Agriculture on the top of the ridge. These commissions were interiors, which had to be accommodated in neoclassical buildings of the most different nature.

The linguistic diversity and the varied spatial quality of these eight neoclassical palaces –and the areas devoted to the display of the 342 German industries– indicate the colossal challenge that Reich and Mies faced to accomplish this endeavour. The spatial structures of the given palaces (most of them designed by local architects) ranged from ample horizontal spaces with steel columns of great slenderness, to double-height volumes resting on Corinthian columns, as the numerous interior photographs attest. Their assorted size is also apparent when comparing the ground plans (Fig. 1).⁶ The dark shading in the image shows how the German sections occupied spaces of very different dimensions and kinds: between 2000 and 3000 m² devoted to Electricity, Motive Force and Chemical Industries, Communications and Transport, and Textiles Industries; 1,500 m² to the different exhibits distributed in the Southern palace; around 700 m² to Graphic Arts; smaller and varied areas to Decorative and Industrial Arts, as well as to Agriculture. Additionally, the German objects on display ranged from light to heavy industries. Thus, achieving consistency by providing a neutral background (where to underscore the particularities of the objects themselves) was not a minor challenge for the architects.



Fig. 1. 1929 Barcelona International Exposition site plan with the German presence marked in the different palaces. Collage by the author.

Legend

Pavilions.

30. German Pavilion.

139. Electrical Industries Pavilion

Industrial Exhibits distributed in Palaces

4. Palace of Graphic Arts, *Buchgewerbepalast*: 680 m²

5. Palace of Agriculture, *Landwirtschaftspalast*: 100 + 20 + 1300 + 100 m²

6. Palace of Decorative and Industrial Arts, *Gewerbepalast*: 841 + 400 + 100 + 100 m²

7. Machine Palace (Electricity, Motive Force and Chemical Industries) *Chemie- und Maschinenpalast*: 2500 + 2117 m²

9. Palace of Projections, *Projektionspalast*: 529 m²

10. Palace of Communications and Transport, *Verkehrspalast*: 3000 m²

11. Palace of Textiles Industries, *Textilpalast*: 3000 m²

46. Southern Palace, *Konstruktionspalast*: 1500 m²

*Numbering according to the Spanish catalog of the German section.

Published in *Exposición Internacional de Barcelona 1929: Catalogo oficial de la sección alemana* (Berlin: Reichsdruckerei, 1929).

5 The German section of the International Exhibition of Barcelona occupied a total surface of 17.562 m², including the official Representative Pavilion and its garden, which took up 258 m² and 417 m² respectively, and the Electrical Industries Pavilion that extended over 600 m². The exhibition in the Palace of Textile Industries and the Palace of Decorative and Industrial Arts, the two palaces where the Bauhaus was present, occupied 3.000 m² and 1.441 m² respectively. In total, 342 German exhibitors took part in the different sections of the International Exhibition. Box 47174, Expo 1929 Inventari Objectos de Artes. Exposición. Barcelona Extranjero y Estado. "Exposición Internacional de Barcelona 1929. La sección extranjera de la exposición." Arxiu Contemporani, Exposición Internacional de 1929 (1923-1942), Barcelona.

6 See the official catalogue publication *Internationale Ausstellung Barcelona 1929: Machine Palace (Electricity, Motive Force and Chemical Industries Palace), (Chemie- und Maschinenpalast), 2; Projections Palace (Projektionspalast), 35; Palace of Communication and Transport (Verkehrspalast), 39; Palace of Textile Industries (Textilpalast), 51; Palace of Decorative and Industrial Arts (Gewerbepalast), 61; Palace of Agriculture (Landwirtschaftspalast), 71–3; Palace of Graphic Arts (Buchgewerbepalast), 79; Southern Palace (Konstruktionspalast), 87.* Copy deposited at the Bauhaus-Archiv, Berlin.

There were areas, such as the ample 3,000 m² space devoted to the Palace of Communications and Transport, which Reich and Mies left almost bare, so that the German means of transportation could be openly seen underneath the vaulted hangars. Others, such as the space devoted to the now famous beer-stand from Munich, which were simply sandwiched in an U-shape created by three walls between four Corinthian columns. Reich and Mies proposed different finishings depending, not only on the spatial structure of the given neoclassical palaces, but also, on the light-or-heavy character of the industries that would be on display. One clear example is the varied way in which they responded to two predetermined and similar interiors: that of the Electricity and Motive Force Industries and that of the Chemical Industries, to the left and right sides of the Machine Palace. In the Chemical Industries section, their aim was to cover the floors with linoleum, to lower the height of the ceiling with a hanging ceiling composed by one-meter-wide textile bands, and to panel most of the vertical surfaces in white whilst in the Electricity and Motive Force section, all surfaces were left bare.

The design of vitrines, shelves, lettering and signage was not a minor issue. Reich and Mies designed an extensive range of pieces of furniture to display a varied array of industrial products: from chemical compounds and optical objects to books and graphic arts. Additionally, the two architects naturally introduced 'still-lives' composed by tubular-steel furniture such as Mies's MR10 chairs, MR20 chairs, MR1 stools, as well as MR30 tables (Fig. 2). These pieces of furniture had originally been designed in 1927 for Mies's apartments at the Werkbund exhibition *Die Wohnung* (The Dwelling) at the Weissenhofsiedlung in Stuttgart, forming a consistent group of a chair, a chair-with-armrests, an ottoman, and a small round table. Metallgewerbe Joseph Müller from Berlin was the company that commercialized all the furniture from the German interiors in Barcelona, and also provided the steel frames for the freestanding elements that supported most of the objects on display.

The fifteen interiors distributed over eight palaces show how, with a few materials and a series of carefully controlled design strategies, Reich and Mies were successful in placing the heterogeneous objects of the German industries comfortably against a uniform background. The MR chair/ chair-with-armrest/ ottoman/ table sets, and the way they had been carefully introduced, played a crucial role in procuring formal consistency to a series of spaces that were otherwise heterogeneous in character. The official catalogue included a full-page advertisement of the

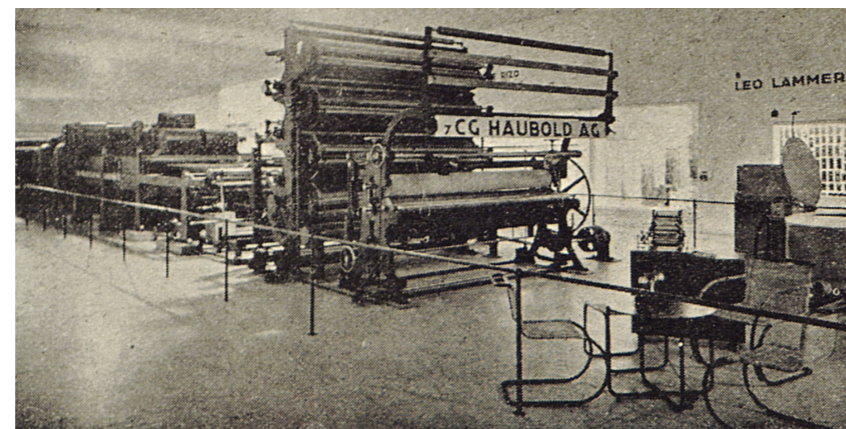


Fig. 2. Area of Textile Machinery at the Palace of Textiles Industries, with Ludwig Mies van der Rohe's furniture in the forefront. Published in *Exposición Internacional de Barcelona Diario Oficial*, no. 34, October 26, 1929, 4. Biblioteca Nacional de España.

steel-tube MR 10 chair with the seat and the back in 'Lilly Reich Weave',⁷ since Mies took every opportunity to blatantly promote his furniture in what seemed to be a new promising market.⁸

The omnipresence of Mies's furniture in every single interior of Barcelona, and the quick and widespread commercialisation of it in Spain, led the Basque architects Joaquín Labayen (1900–1995) and José Manuel Aizpurúa (1902–1936) to choose the MR10 chair in wickerwork for the interior of the Nautical Club House they opened in San Sebastian in the summer of 1929, four months after the opening of the Barcelona International Exhibition, on the other side of the Franco-Spanish border. The mobility of the MR chair, its journey from Barcelona to San Sebastian, is relevant because it traces the travel itinerary that Anni and Josef Albers (1888–1976), followed from the Mediterranean to the Cantabric border of Spain that summer of 1929 (Fig. 3).⁹ It also shows the impact of Mies's furniture in the shaping of modern interiors, since the German Pavilion in Barcelona and the Nautical Club House in San Sebastian would be precisely the only two works built on Spanish ground to be part of the *Modern Architecture: International Exhibition* at the MoMA in 1932.¹⁰

As explained, the fact that the Bauhaus had sent objects to two of the Barcelona exhibits, the Palace of Textile Industries and the Palace of Decorative and Industrial Arts, was the main motivation for the Alberses to decide to embark on a Southern European journey, since some of the fabrics woven by the Bauhaus weaving workshop (probably even by Anni Albers) were displayed in the German section of the Textile Industries.

The Palace was a neoclassical building finished by local architects Joan Roig and Emili Canosa in 1928. The area occupied by the German section extended through the front axis, and occupied an area equivalent to the space underneath the main dome. Austria, France, Italy, Spain, and Switzerland inhabited this space as well as the two other square areas on either side of it, and an extension to the northern side of the interior aisle. The plan for each of these squares was

7 This is the name that was given to the version of the chair in wickerwork, since it was long thought that Mies's tubular Steel models MR10 and MR20 had been 'revised in 1927 by his employee, Lilly Reich.' However, this is a fact that has been refuted in ZI Research Group, "The 'Lilly Reich Weave,'" in Helmut Reuter and Birgit Schulte (eds.), *Mies and Modern Living: Interiors, Furniture, Photography* (Ostfildern: Hatje Cantz, 2008), 139.

8 The full-page advertisement included in the official catalogue reads: 'The MR chair is elastic and follows the movements of the body. It is made out of steel tubes and it is delivered in chrome, nickel or lacquered in color, and the seat and the back come in leather or wickerwork. Better quality, bigger solidity' (translation by the author). Mies registered the patent of the MR10 chair for its 'improvement in chairs and curved armchairs' a few days after the opening of the Barcelona International Exhibition in 15 June 1929. On Mies's business with patent registrations of his chairs see Pablo López Martín, "La silla de la discordia. La pequeña escala como campo de experimentación de la modernidad. Breuer, Mies y Stam" (PhD diss., Universidad Politécnica de Madrid, January 2016).

9 See Laura Martínez de Guereñu, "Bauhäuslers on the Franco-Spanish Border," *Architectural Histories*, 4, no. 1 (2016), 15, DOI: <http://doi.org/10.5334/ah.191> (Special issue: Travel).

10 Mies's German Pavilion at the Barcelona Exposition (187–8), Labayen & Aizpurua's Nautical Clubhouse in Donostia-San Sebastián (174), in Henry-Russell Hitchcock Jr. and Philip Johnson, *The International Style: Architecture since 1922* (New York: W. W Norton & Company, 1932).

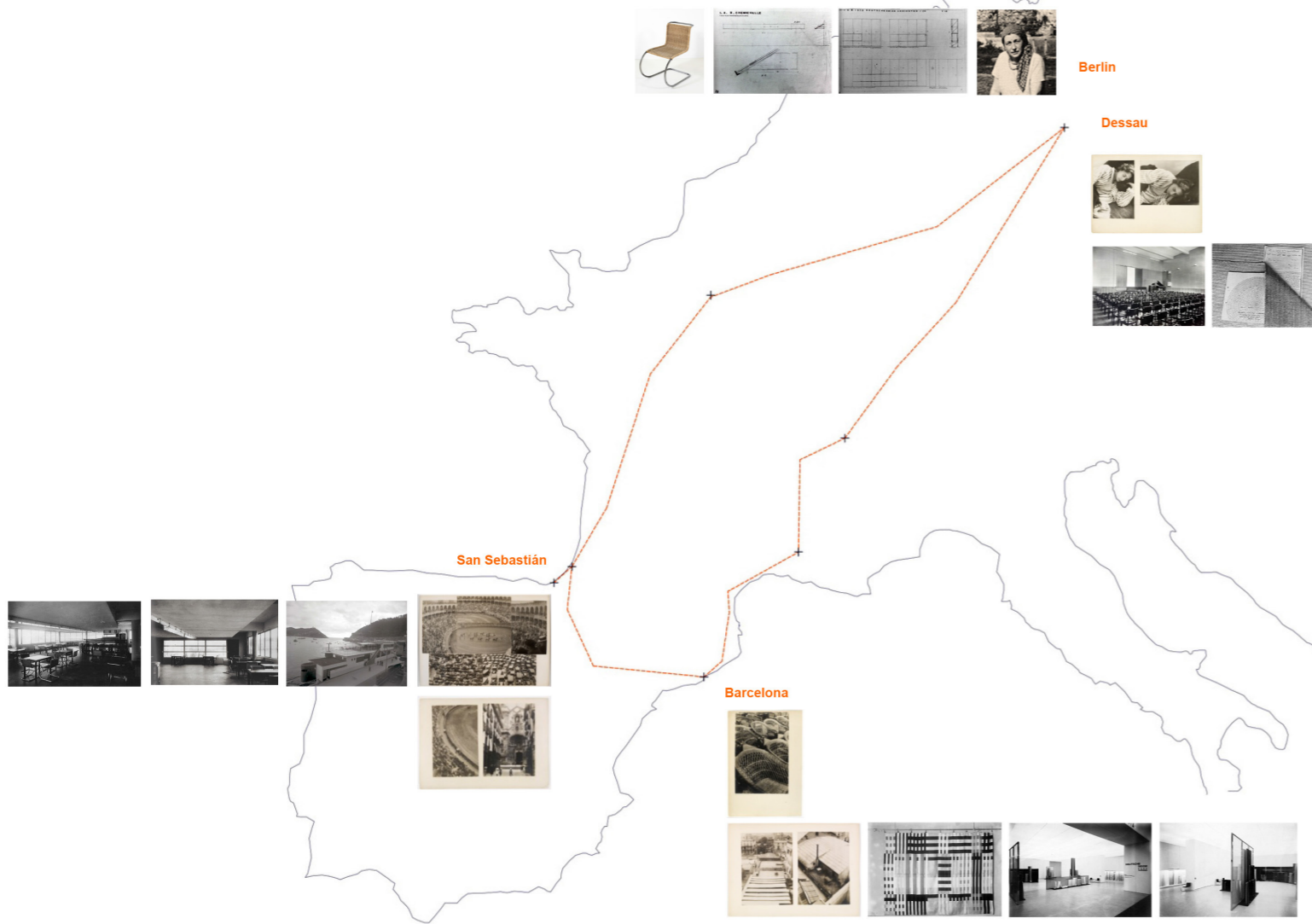


Fig. 3. Itinerary of Anni and Josef Albers during the summer of 1929, with designs and pieces of furniture of members of the Bauhaus. Mapping by the author.

Legend

Berlin:

Portrait of Lilly Reich; Plans of the interiors of Barcelona Exhibits; Ludwig Mies van der Rohe's MR10 chair in wicker.

Dessau:

Photocollage of Anni Albers by Josef Albers; Interior view of the auditorium of the ADGB building; Wall covering material for the auditorium.

Barcelona:

Photocollages by Josef Albers; Textile design by Anni Albers; Interior views of Deutsche Seide at the Palace of Textiles Industries.

San Sebastián:

Photocollages by Josef Albers; Exterior and Interior views of the Nautical Club by Joaquín Labayen and José Manuel Aizpurúa.

organised according to a classical compositional spatial structure. Four main columns created a central square accompanied by eight other smaller columns, placed toward their two perpendicular sides in each area; all of them together supported friezes that crossed and marked the height of the ceiling perpendicularly.

Reich and Mies created a ground-breaking design for this exhibition space, which clearly contrasted the architecture of the designated neoclassical palace as well as the interior design of the rest of the represented countries in the same building. It is worth comparing the original distribution of the stands anticipated by the general committee of the Barcelona exhibition, with the way Reich and Mies organised the German products.¹¹ In the original Palace of Textile Industries, a steel structure was covered with plaster creating concentric friezes at a low height and the stands were rationally organised following these concentric areas. Reich and Mies broke the alignments of the distribution of the stands, allowing the visitors to move freely across the space. In order to do so, they covered the perimeter walls with modular white panelling and created four cabinets in the form of an L (facing each other towards the central space) thereby distinguishing a perimeter circulation from a central space (Fig. 4).

In the central area, the weavings were hung from freestanding bars of different width and height that advanced over an array of isolated coloured glazed walls of chrome carpentries. These coloured-glass walls, including a curved one, divided the space, while allowing a view through it. The cabinets in the form of an L, as well as the perimeter walls, served as backdrops for the freestanding coloured glass walls and the textiles hanging from them. Thus, the modular repetition of the white wood panes in the background, the four L-shaped cabinets, and the freestanding glazed walls created a balanced atmosphere in which the objects on display were foregrounded (Fig. 5). The images of this interior space show some of the many details of the panelling that were designed in order to create a distinct interior to the one originally offered in the form of a neoclassical palace. The photographs also reveal how assorted the areas of the section were, accommodating miscellaneous products and machines.

As the official catalogue of the German presence in Barcelona reveals, the Bauhaus was exhibited in one of the displays of the perimeter spaces on the left side of Deutsche Seide, amongst thirty-eight other German industries distributed in the entire area, including companies such as Gütermann that still survive today.¹² As the listing reads, the objects that the Bauhaus sent to this section were

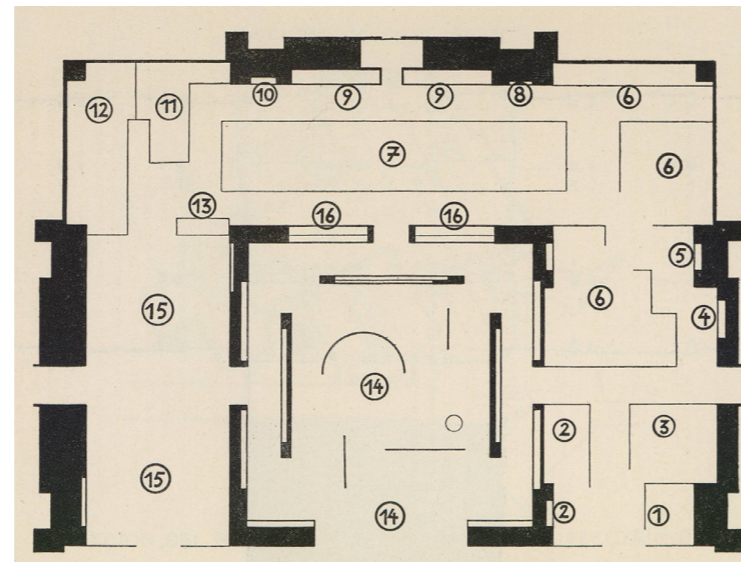
¹¹ The original plans with the exhibitor-distribution of the different palaces that are stored as part of the holdings of the Arxiu Contemporani in Barcelona [Exposició Internacional de 1929 (1923–1942)] differ substantially from the plans designed by Reich and Mies, as the plans of the Mies van der Rohe Archive and the numerous photographs of the exhibition display attest.

¹² The list of objects in the section devoted to the Palace of Textile Industries (*Textilpalast*) that also shows a distribution plan in one of the publications about the German presence in Barcelona reads: '15. Bauhaus Dessau, Dessau: Vorhangstoff, Diwanddeckenstoff, Spannstoff.' See *Internationale Ausstellung Barcelona 1929*, 58.

Fig. 4. Plan of the Palace of Textiles Industries, with reference to the different German exhibitors.

Legend

1. Berlin-Karlsruher Industrie-Werke Aktien-Gesellschaft, Karlsruhe (Baden)
2. Mundlos Aktien-Gesellschaft, Nähmaschinen-Fabrik, Magdeburg-Neustadt
3. G. F. Grosser, Fabrik für Flachstrick-maschinen, Rundstrickmaschinen, Spulmaschinen, Markersdorf (Chemnitztal)
4. Louis Bahner, Strumpfwirkerei, Oberlungwitz (Sachsen)
5. Gütermann & Co., Nähseidenfabrik, Gutach (Breisgau)
6. Limbacher Maschinenfabrik Bach & Winter, Limbach (Sachsen)
- Biernatzki & Co., Chemnitz
- Emil Wirth, Wirkmaschinenfabrik, Hartmannsdorf bei Chemnitz
- Seyfert & Donner, Chemnitz
- Dürkoppwerke A.-G., Nähmaschinenwerk, Bielefeld
- G. Hilscher, Wirkmaschinenfabrik, Chemnitz
- C. A. Roscher Söhne, Rundwirk – und rund-Strickmaschinenfabrik, Mittweida (Sachsen)
- Chemnitzer Strickmaschinenfabrik A. –G, Chemnitz
7. C. G. Haubold A. –G, Maschinenfabrik, Chemnitz
8. Leo Lammertz, Nadelfabrik, Aachen (Rheinland)
9. S. Fränkel, Tischzeug-, Leinwand . und Frottierwarenfabrik, Neustadt (Ober-Schlesien)
10. Wilhem Geidner, Metallwarenfabrik, Kempten (Bayern)
11. Mauser-Werke A. ´G., Werk Spezialnäh-Maschinenbau, Oberndorf am Neckar (Württemberg)
12. Elite-Diamantwerke Aktiengesellschaft, Siegmars-Chemnitz
13. Erich Barth, Chemnitz
14. Deutsche Seide
 - a. Verein Deutscher Seidenwebereien, Krefeld
 - b. Verband Deutscher Samt – und Plüschfabriken, Krefeld
 - c. Vereinigte Glanzstoff-Fabriken A.-G., Elberfeld
 - d. I. P. Bemberg A. –G, Barmen-Ritters-Hausen
 - e. I. G. Farbenindustrie A. –G., Abteilung Kunstseide, „Agfa“ Berlin so 36.
- 15a. Handweberei Hablik-Lindemann, Itzehoe (Holstein)
- 15b. Bauhaus Dessau, Dessau
- 15c. Deutsche Textile Kunst Deteku, Rudolf Hiemann, Leipzig



- 15d.u.f. Mechanische Weberei Pausa A., -G, Stuttgart
- 15e.u.k. Deutsche Werkstätten Textilgesellschaft M. B. H. Dresden –A.
- 15g. Staatliche Hochschule für Handwerk und Baukunst, Weimar
- 15h. Spitzenwerkstätte, Elfriede Freiin von Hügel, Stuttgart.
- 15h. Forkelsche Arbeitsgemeinschaft, Plauen (Vogtl.)
- 15h. Staatliche Kunstschule für Textilindustrie, Plauen (Vogtl.)
- 15h. Spitzenkunst L. Matthaei, Hannover, Ferdinandstrasse 41
- 15h. Frau Margret Klaiber-Gminder, Öhringen (Württemberg)
- 15i. Staatliche Spitzenklöppelschule Tiefenbach, Tiefenbach (Oberpfalz, Bayern)
- 15i. Staatliche Spitzenklöppelschule Stadlern, Stadlern (Bayern)
- 15i. Staatliche Spitzenklöppelschule Schönsee, Schönsee (Bayern)
- 15i. Staatliche Klöppelschule Nordhalben, Nordhalben (Bayern)
- 15i. Staatliche Klöppelschule Abenberg, Abenberg (Bayern)
16. Nieuhuus & Dütting, Baumwollspinnerei, Weberei, Färberei, Bleicherei, Nordhorn (Hannover)

Published in *Exposición Internacional de Barcelona 1929: Catalogo oficial de la sección alemana* (Berlin: Reichsdruckerei, 1929), 50–57.



Fig. 5. Lilly Reich and Mies van der Rohe, Interior view of the Palace of Textile Industries. Courtesy of the Bauhaus-Archiv, Berlin.

samples of drapery material, upholstery material, and wall-covering material, the three types of utilitarian and anonymous weavings Anni Albers designed, together with her own artistic wall hangings, at the Bauhaus weaving workshop. However, there are no photographs that can show how the

space on this side of the perimeter gallery had been distributed. Instead, there are two photographs showing sewing machines by Mauser-Werke A. G., knitting machines from Elite-Diamantwerke, and every kind of textile machine from C. G. Haubold A. G., in the continuing perimeter of the gallery. The longitudinal arrangement of this machinery recalls another project that Reich had designed on her own three years earlier for the International Frankfurt Fair: 'Von der Faser zum Gewebe' (*From Fiber to Textile*). In this design Reich had foregrounded the display of the industrial process of production, showing the manufactured raw materials and distinguishing between phases and types in an almost scientific way.¹³ This precedent clearly reveals Reich's responsibility in the overall design of the interior at the Palace of Textile Industries of Barcelona, something that Mies never obscured.¹⁴

¹³ See Matilda McQuaid, "Lilly Reich and the Art of Exhibition Design," in McQuaid, *Lilly Reich*, 21.

¹⁴ In the introductory note to *Barcelona Exhibits 1929* published in *The Mies van der Rohe Archive* by Garland, Franz Schulze only recognizes that 'the special talents of his companion, the designer Lilly Reich, proved of inestimable value' when Mies was called upon to oversee the layout and the design of the individual exhibits of Barcelona. See Arthur Drexler (ed.), *The Mies van der Rohe Archive*, Vol. 2 (New York: Garland Publishing Co., 1986), 246. Valentín Trillo explains also how Mies named Reich co-author of the entire Barcelona exhibits project in the letter he sent to commissioner Von Schnitzler on 28 September 1929, in which he justified a summary of the budget of the German participation in Barcelona. Bundesarchiv, Politisches archive, MAEB R240030/ 0107-0138. Berlin, October 7, 1929. Quoted in Valentín Trillo, "Mies in Barcelona: Arquitectura, representación y memoria" (PhD diss., Universidad de Sevilla, January 2016), 289. Additionally, correspondence between the office of Internationale Ausstellung Barcelona 1929, Der Deutsche Generalkommissar in Barcelona and Lilly Reich in Berlin, from 26 November 1929, discussing the days of work devoted to the installation of different industries on display at the Textile Pavilion (2 days for Nieuhuus & Dütting; 4 days for Bauhaus, Pausa, etc; 2 days for Spitzen; 2 hours for Güttermann and 23 days for Deutsche Seide) can be found at the Mies van der Rohe Archive, the Museum of Modern Art, New York.



Fig. 6. Anni Albers, *Wall Hanging*, 1926, Woven, Silk (three-ply weave); actual: 178.8 x 117.8 cm (70 3/8 x 46 3/8 in.).

Courtesy of Harvard Art Museums/Busch-Reisinger Museum, Association Fund, BR48.132

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(Photo: Imaging Department © President and Fellows of Harvard College).

However, there is no evidence of which specific weaving samples the Bauhaus sent to Barcelona, nor whether some of them were made by Albers herself or not. The interior of the Palace of Textile Industries was clearly the most successful one of the entire fair, for it showed the high quality and modern taste of the German textile industries.¹⁵ It has also been discovered that Anni was always the one in charge of 'engineering' the trips and arranging the itineraries that she and Josef would follow, which leads one to think that it was her idea to embark on a Southern trip, from Dessau to Barcelona, in the summer of 1929.¹⁶

During the 1920s, Anni Albers's artistic work developed on a parallel track to that of Josef Albers. Anni's weavings and Josef's glass paintings show an interest in exploring the same architectural themes. It is easy to find striking correspondences, as is the case with some of her weavings such as *Pictorial Tapestry* (1925), and his glass paintings such as *Skyscrapers on Transparent Yellow* (1929); or with *Wall Hanging in Silk* (1926) (Fig. 6) and *Interlocked* (1927) (Fig. 7). Although the architectural implications of Josef's glass paintings might be more apparent (due to the way they represented overlapping of horizontal floors or the play between regular supports and cantilevers), the exchange –and the mutual influence– of their work is obvious. Looking at the dates, it can be inferred, however, that it was Anni who influenced Josef on his tectonic explorations during the 1920s. Besides this, Anni had recognised the impact that Tuscan architecture,

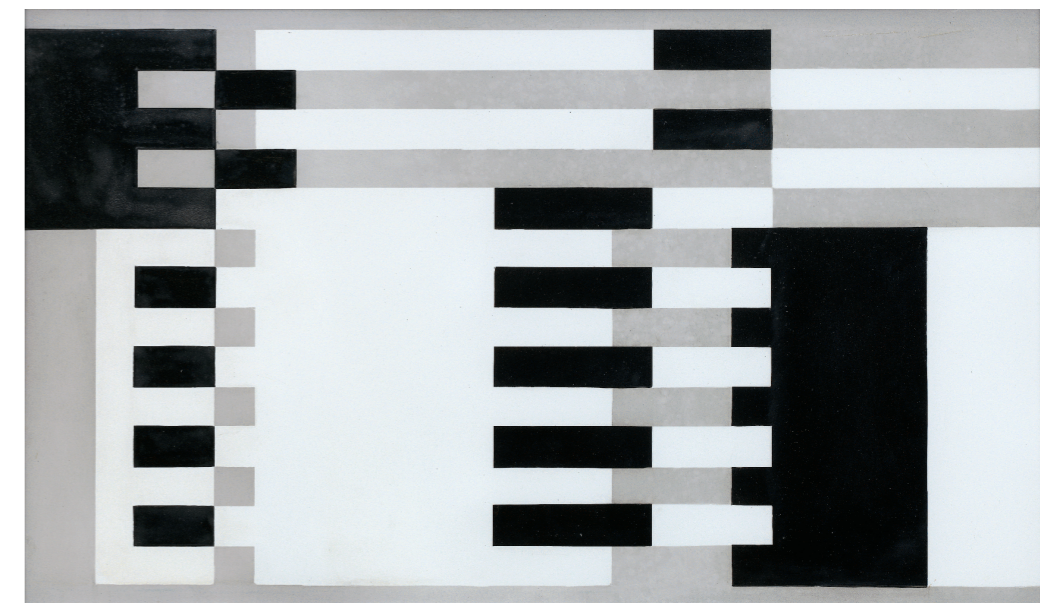


Fig. 7. Josef Albers, *Interlocked*, 1927, Sandblasted opaque flashed glass. 32,7 x 52,2 cm, Solomon R. Guggenheim, New York. Gift, The Josef and Anni Albers Foundation, Bethany, 1991.

especially the strip patterning –the alternating bands of stone of the Basilica of the Santa Croce and the Duomo Cathedral in Florence– had had on their work in 1925.¹⁷ And for this reason it is not difficult to think that the Mediterranean architecture the Alberses saw in Barcelona had a similar impact on their work. If one looks at *Komposition*, the wall hanging Anni developed in 1929/1930, after their trip to Barcelona, in parallel to *Pergola*, Josef's last glass painting in his idiosyncratic 'thermometer style',¹⁸ also created after the same trip, it is clear that they were both exploring and translating the same tectonic concerns. Their resemblance with the horizontal pergolas Josef captured in the interior courtyard of the Hotel Colón in which they stayed is quite astonishing. One of the images of the photo collage created by Josef Albers years later shows that some of the commercial extensions of the ground level were protected by subsequent bands of long horizontal pergolas for shadow production, very present in Mediterranean architecture.¹⁹

But this is not what interests us most about the impact the trip to Barcelona may have had on Anni's work. Anni would graduate the following February, weaving a complex textile as her final project,

17 See Nicholas Fox Weber, *The Bauhaus Group: Six Masters of Modernism* (New York: Alfred A. Knopf, 2009), 370.

18 The 'stripping' strategy that acquired the name of 'thermometer style' consisted in the employment of single pieces of opaque glass with surfaces of different colours. Josef Albers sewed bands in groups of different widths and visual weights with a variety of vertical columns, producing an effect of spatial superposition that created the illusion of transparency. Albers developed this technique to be able to create a multifaceted spatiality in single pieces of opaque glass, since for him, 'combination [became] as important as composition' in the design of his glass paintings. See "On My Glass Wall Paintings" (1933). In *Josef Albers: An Anthology (1924–1978)* (Commentaries on texts by and on Josef Albers by Laura Martínez de Guereñu), in *Josef Albers: Minimal Means, Maximum Effect* (Madrid: Fundación Juan March, 2014), 217, Exhibition catalogue.

19 The resemblance between Josef Albers's, *Studie für die Glasskonstruktion Pergola*, December 1929, and Anni Albers's *Komposition*, tapestry, 1929/1930, both at the Stiftung Bauhaus Dessau, point to one of the three images that Josef Albers took in Barcelona: *Barcelona from the Hotel Colón '29*, 1929. Gelatin silver print, mounted on cardboard, photocollage, 29,5 x 41 cm. The Josef and Anni Albers Foundation, Bethany (1976. 7.11).

15 "Una visita a la sección alemana de la Exposición de Barcelona," in *Exposición Internacional de Barcelona. Diario Oficial*, no. 12, June 2, 1929.

16 Anni Albers recognized this role she had two years earlier, with the previous trip they had made to Spain, that time on a Banana boat, to the Canary Islands. 'I was always the adventurous one who arranged tickets and visas and I had the idea that we should do (sic) a journey: we went on a banana boat to Tenerife [1927]. The whole trip there and back took five weeks. We travelled on mule back up to the pick. There were two other islands still that we visited. All was really quite adventurous.' Conversation between Anni Albers and Nicholas Fox Weber in Orange, Connecticut. October 21, 1974. Tape 2 (side A), 6:58 min; 'I was always the one who thought of [travel] when we were still at the Bauhaus.' See Maximilian Schell, interview with Anni Albers, Orange, Connecticut, December 16, 1989. Box 21, Folder 6, The Anni Albers Papers. The Josef and Anni Albers Foundation, Bethany, CT.

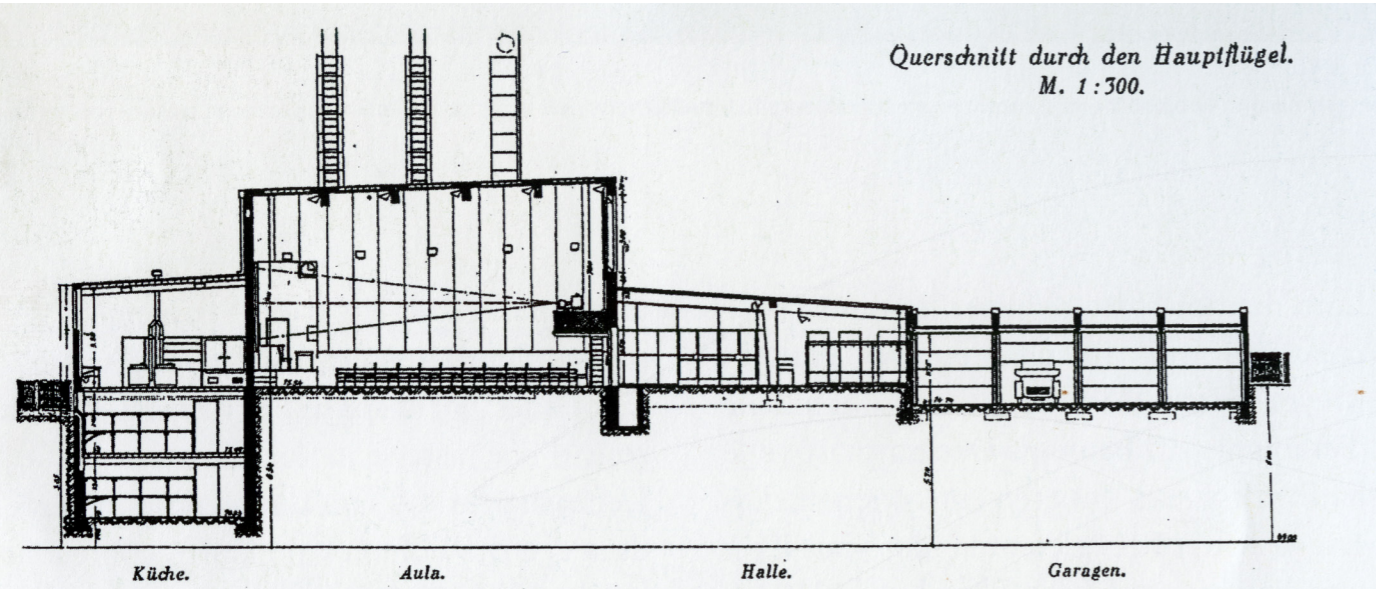


Fig. 8. Hannes Meyer, Section of the auditorium of the ADGB building, Bernau, Germany, 1929. Published in *Sonderdruck aus dem Zentralblatt der Bauverwaltung* 51, no. 14 (1931), 215.

which would solve an acoustic problem in a collective building. It was a wall-covering material for the Bundesschule Auditorium of the Federal School of the ADGB (*Allgemeiner Deutscher Gewerkschaftsbund*) in Bernau, which Meyer, then the director of the Bauhaus, was finishing in collaboration with the Bauhaus workshops.²⁰ The building had been under construction since 1928. Years later, Anni Albers herself explained how Meyer was building a union school and had come up against an echo problem in the auditorium. Meyer asked Albers specifically whether she could take care of that problem.²¹ The section of the auditorium shows the extensive surface where Albers would need to intervene (Fig. 8).

The conventional thing to do at that time was to put velvet on the walls, because the fibers absorbed sound. But it would have to be in a dark colour, because the room was going to be used by hundreds of people, and the marks of fingerprints had to be avoided. Albers then decided to experiment with a then new synthetic material from Italy, a kind of cellophane.²² Albers explained that the greatest shift took place at the Bauhaus when, in her own words, 'the idea of a practical purpose, a purpose

20 As a 'communal effort of craftsmen and inventors,' this construction materializes the words of "building," the famous thesis that Hannes Meyer published in *Bauhaus* 2, no. 4 (1928). Republished in Ulrich Conrads, *Program and Manifestoes on 20th-century Architecture* (Cambridge, Mass., The MIT Press 1970), 117–20.

21 Neil Welliver, "A Conversation with Anni Albers," in *Craft Horizons* 25, no. 4 (July - August 1965), 42.

22 'Cellophane just was coming in as a new material – we have been in Florence, Italy, and I had bought a little crocheted cap made of this material. And I unraveled it and used it for the first attempt.' In Savim Fesci, "Interview with Anni Albers, Orange, Connecticut, July 5, 1968," Archives of American Art, New York, <http://www.aaa.si.edu/collections/interviews/oral-history-interview-anni-albers-12134> (accessed July 4, 2017).

aside from the purely artistic one' brought about a profoundly different conception of her work.²³

Following this idea, what Albers created was an interesting 'construction' with multiple threads: cellophane on the front (for light reflection) and white velvet on the back (for sound absorption) (Fig. 9). With this light-reflecting straw-like material on the surface, the walls could be white, because they could be cleaned by brushing. Later on, Zeiss Icon Works in Germany analysed of how the light-reflecting surface worked when the light fell on it at different angles. By this means, she demonstrated that scientific penetration was possible for textile knowledge, following the demands of the Bauhaus at that time.

Anni stated that textiles for interior use could be regarded as architectural and that, when they were not pliable, they had to compete against other materials.²⁴ This is precisely what she did with the textile of Bernau, weaving it with two opposed sides and producing an architectural element that was light-reflecting, sound-absorbent, and easily cleanable (Fig. 10). However, what made this textile architectural was probably the fact that Meyer proposed the project to her as 'a problem to solve.'²⁵

Anni was able to understand it as such for the interior design projects she had recently seen in Spain. There, at the Palace of Textile Industries of the Barcelona International Exhibition, Reich and Mies, had also treated textiles as architectural elements, putting them at play with the white paneling and the freestanding glass walls. Such an innovative design is unlikely to have gone unnoticed by Anni



Fig. 9. Anni Albers, View of the cellophane and the velvet sides, wall-covering material for the auditorium of the ADGB building, Bernau, Germany, 1929. Courtesy of the Bauhaus-Archiv.

23 Anni Albers, "Weaving at the Bauhaus" (September 1938, revised July 1959), in *Anni Albers: Selected Writings on Design* (Middletown, CT: Wesleyan University Press, 2000), 4.

24 'It is really interesting to concentrate like an architect has to concentrate on the functioning of a house, so I enjoyed concentrating on what that specific material demanded. I developed a series of wall covering materials, which at the time I did it was non-existent really. And I tried to make them so that they were partly even light reflecting, that they could be brushed off, that they could be fixed straight and easily on the wall without pulling into different shapes, you know. So a specific task sets you a very interesting way of dealing with your choice of material, with your technique, and so on.' In Fesci, Interview with Anni Albers, Orange, Connecticut, July 5, 1968.

25 '[Hannes Meyer] was building a union school and had come up against an echo problem in the auditorium...He asked me if I could think of something to take care of this problem...This material was used in this hall effectively.' In Welliver, "A Conversation with Anni Albers," 42. Meyer disregarded the artistic dimension of architecture. As the first sentence of his text "building" reads, 'all things in this world [were] a product of the formula: (function times economy)'. See Meyer, "building," 117.



Fig. 10. View of the auditorium room of the ADGB building, covered with Anni Albers's textile. Courtesy of the Bauhaus-Archiv.

Albers, and probably more than one story could be told about the impact that the many interiors Lilly Reich and Mies designed for Barcelona 1929 have since had on architectural culture.

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