

L'Espanya Industrial and the Barcelona Universal Exhibition of 1888

by ASSUMPTA DANGLA

¹ GUTIÉRREZ, M. Lluïsa, *La España Industrial. Innovació i recerca*. Col·legi d'Enginyers Industrials de Catalunya, Barcelona, 1997.

² CABANA, Francesc. *Fàbriques i empresaris. Els protagonistes de la Revolució Industrial a Catalunya*. Vol. 2. *Cotoners*. Diputació de Barcelona, 2001, p. 83-112.

L'Espanya Industrial was the first cotton firm to set up in Spain, and it was also one of the most important until well into the twentieth century. From its foundation, it fought hard to overcome the crises that arose and was able to do so thanks, to a large extent, to its commitment to development, innovation and research.

In the mid-nineteenth century, as manufacturing began to give way to factory production, technology transfer took on a leading role in the textile industry. In Catalonia, some companies brought in new procedures that favoured the transmission of knowledge. *L'Espanya Industrial* played its part in this process by introducing specific measures that allowed it to expand its resources. For instance, its managers and technical staff travelled abroad to keep abreast of the latest developments and to purchase machinery, especially in France and England; they studied at training centres in other European countries, hired technical staff from abroad and kept in constant contact with other companies in the field¹. At this time the latest innovations were beginning to reach Catalonia via domestic and foreign trading companies which imported and sold machinery and chemicals, and leading European firms opened branches in Catalonia. *L'Espanya Industrial*, always attentive to the needs of the market and the latest discoveries, was quick to capitalize on these resources.

The company was founded in 1847 by the seven sons of Maties Muntadas and Francesca Campeny, woolmakers from Igualada. The brothers were all present to a greater or less extent in the creation and launch of the factory. The first two managers were brothers, and the third was Maties Muntadas, son of Josep Antoni Muntadas, also one of the founders. Maties Muntadas ran the company from 1882 until 1927². His strength of character and the determination with which he led the company were crucial to *l'Espanya Industrial's* survival.

From the very beginning, the company was keen to establish itself and it participated at national, international and universal exhibitions. Indeed, *l'Espanya Industrial* won two gold medals at the Universal Exhibition of 1888, a showcase event where the firm displayed its innovations and worked hard to expand its range of customers. One of the promoters and members

	Encarnado 2	2,50	185	0,47	2,90 Ptas
	Verde 2 (1-10)	0,43	380	0,14	
	Cochu 12 (1-1)	1,45	185	0,27	
	Verde BS 1	0,75	565	0,23	
	Oliva C	0,50	440	0,22	
	Oliva 10 (1-1)	1,07	410	0,44	
	Aguja AVN	1,00	900	0,90	
San Agustó.	Sumen	3,065	2,90		

Expenditure log for dyes, 1888.
MEPM 6075. Photograph: Esther
de Prades.

of the Commission for the exhibition was precisely the manager of *l'Espanya Industrial*, Maties Muntadas, one of the leading figures in the political life of Barcelona.

Overcoming Crises

3 *Memòria llegida a la Junta General d'Accionistes 23 de febrer de 1890.* Arxiu Històric del Museu de l'Estampació de Premià de Mar.

The years before the Universal Exhibition of 1888 were full of difficulties and management took certain controversial steps. In 1884, the director ordered a detailed study of the costs of the factory. Even the smallest expenditure in each section (yarn, dyes, prints, engravings, cylinders, etc.) was analysed in great detail in order to reduce costs and to increase production.

After the study Maties Muntadas concluded that, above all, the firm needed to overhaul its machinery and begin a savings plan. The decision did not please either workers or shareholders, but the manager pushed on with his project. After a great deal of effort and many delays, the new machinery was installed and put into operation in 1889³. It triggered a remarkable recovery and once again set the company on the path to success.

The year 1887 was marked by a long strike that lasted four months; production fell sharply from 33,189 printed pieces in the second half of 1886 to 18,233 pieces in the first half of 1887. Since 1850, the factory had had a section which engraved many of the copper cylinders that were used in printing machines. As a result of the strike, the section disappeared and many experts who had been in the service of the factory for years were laid off: Joan Puigmacià, Juli Krepser, Damià Coch, Josep Romeu, Antoni Walch, Bernat Berg, Antoni Ratera and Manel Quintana, among others.

The situation of the draughtsmen was quite similar. *L'Espanya Industrial* had had a design section where the leading illustrator was Joan Rabadà Vallbé, a pupil of the painter Carlos de Haes, who had studied at the Llotja School. Rabadà, born in 1850, had worked all his life in the factory; in 1888 he presented his last designs, two of them to commemorate the Universal Exhibition in Barcelona. Another section that suffered the consequences of the crisis was the colours room, which made formulations for the pastes of dyes and printing tests. That year the only colourist who remained on the payroll was Josep Tay, who lost his two companions.

L'Espanya Industrial has been studied in depth from the point of view of economic history and, secondly, from a scientific and technical standpoint, with analyses of documents on dyes and the machinery used in the factory. These



Printed cretonne with cashmere motifs, *l'Espanya Industrial*, 1888. MEP 6191. Photograph: Esther de Prades. [See detail](#).



4 The Premià de Mar Print Museum preserves a large collection of sample books, formula books and original designs from *L'Espanya Industrial*, as do the Textile Museum and Documentation Centre in Terrassa, the Barcelona Design Museum, the History Museum of Sabadell and the Musée de l'Impression sur Étoffes de Mulhouse. These pieces are also to be found in a number of private collections. The Archive of Catalonia and the Premià de Mar Print Museum possess almost all the company archives.

studies have been possible since virtually the entire archive of documents of the company has survived. The correspondence sent and received, the minutes of the shareholders' meetings, the accounting books and other documentation of an economic, social, scientific and technical nature allow us to trace the history of the factory in great detail. The firm also preserved a good set of formula books, sample books, samples and original print designs⁴. This is a relatively rare occurrence: along with the products, the documentation of the factory still exists. The documents are invaluable tools for the study of the pieces, which bear witness to the transfer of technology and provide insights into the relationships between the different sections of the factory, the guiding lines governing the company, and the different stages it went through during its development.

Issues of style and trends

Printing has always been one of the most complex processes in the textile industry. At *l'Espanya Industrial* many different craft workers were involved: colourists, draughtsmen, printmakers and engravers, among others. All these professionals had expertise in their field, but also had to be aware of the different stages that made up the manufacturing; they had to work together on the creation of a mass-produced product and communication between them was a vital part of the process, a task that had to be coordinated by the management.

The designers had to have knowledge of composition, and had to be sure to create drawings that would fit well both lengthwise and in cross-section. Moreover, the designs could only contain a limited number of colours,



Printed cretonne with upholstery designs, c. 1888. Private collection. Photograph: Assumpta Dangla.



depending on the blocks to be engraved or the number of printing cylinders in the machine. Therefore, they produced an original drawing that contained the *rapport*, or the minimum unit of repetition; they then separated the colours and engraved the motifs on wooden blocks or cylinders with the colour to be printed. In the case of *l'Espanya Industrial*, where most of the printing was done with machines containing engraved copper cylinders, up to 12 colours could be printed.

Following the strike of 1887 and the loss of the draughtsman Joan Rabadà, the factory began to order most of the blocks, cylinders and designs from abroad. The firm's correspondence of the time reflects this change. Maties Muntadas often made trips to France to visit draughtsmen and to keep up with the latest trends, and he also asked foreign experts to recommend colourists or highly skilled engravers. And precisely between 1887 and 1889 he contacted new draughtsmen, who supplied the factory with the *most novel designs*, a concept that was often repeated in the firm's documents and was always strongly emphasized.

Following the director's trips to France and the Universal Exhibition of Barcelona of 1888, many draughtsmen came into contact with the factory. In 1888 it had a lively relationship with designers and design studios in Paris and Mulhouse: Constant Tillier, Charles Scheindecker, Henry Andresz, Antonio Badia, Paul Mouton, J. Pfenninger, E. Petitdemagne, Oscar Schmidt, Eugène Schiffmacher, Paul Schnebeler, E. Sins, G. Muller, Mathias Wehrey, Mathias Renner, Daniel Dessins Industriels, Julien & Cron, Kreuscher & Engel, Rhem & Garnache, and others. The firm also received assistance from Charles Ventrillon a draughtsman who had worked for years in the factory and then, after moving to France, acted as a correspondent and sent drawings to Barcelona.

The firm paid great attention to the trends from abroad, especially from France. *L'Espanya Industrial* regularly received samples and notebooks with the latest developments which served as the inspiration for the design of its new collections. The firm had a subscription with the most prestigious fashion houses.

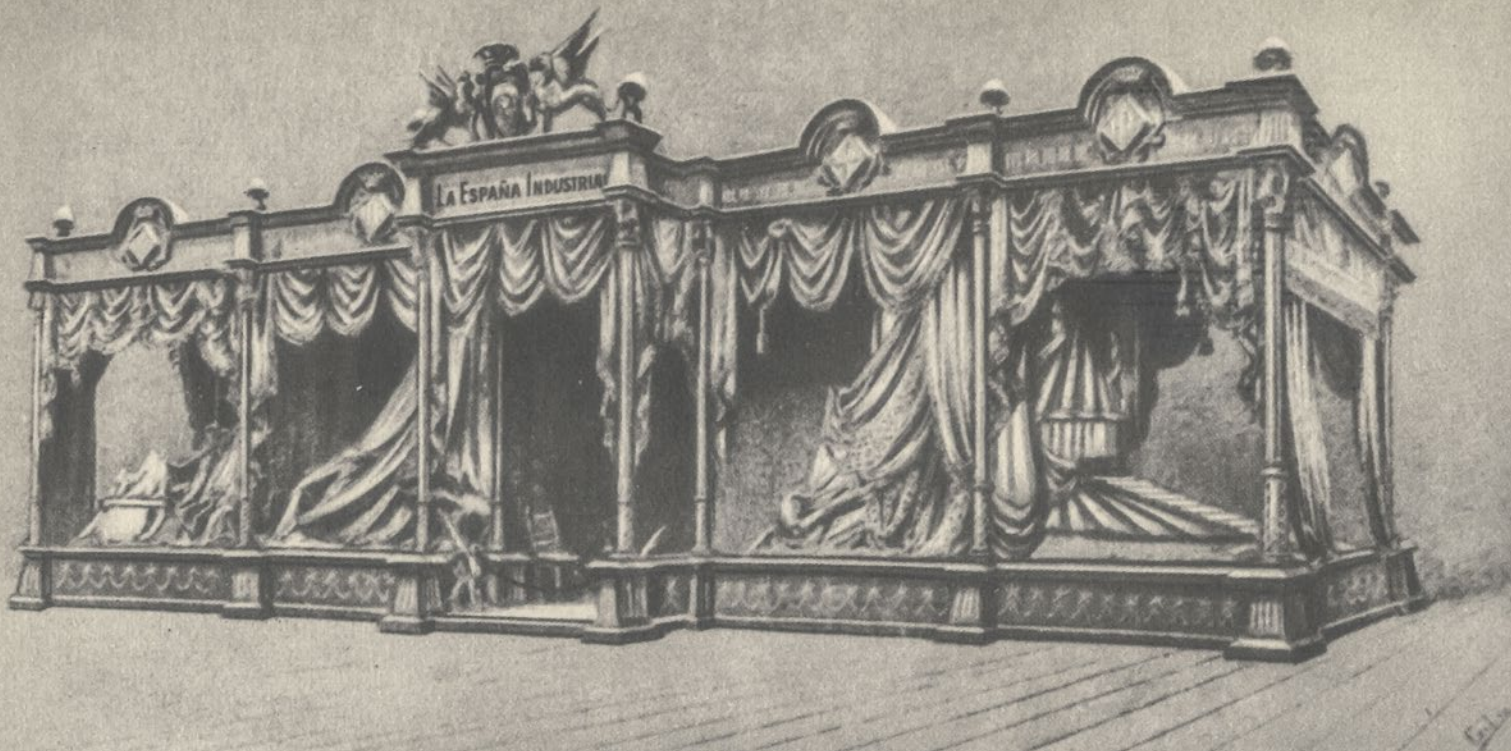
The director gave instructions to his artists, sometimes very precise, on the type and number of colours, indications about the size of the motifs to print, their arrangement, and other issues related to design. These instructions bear witness to Muntadas's extensive knowledge of dyes, machinery and design.

In his correspondence, his instructions regarding *style* or type refer not just to drawing, but to technique, colour and shapes as well. Therefore, the term *style* was not only a formal aspect, but was considered the result of the manufacturing process. In a letter of 1888 to the draughtsman Oscar Schmidt, Muntadas wrote:

Ci joint vous envoie quelques types de une nouvelle fabrication (enlevage sur fond noir) pour vous le faire connaître et vous commander 4 types sur cet ordre de fabrication en tachant de faire quelqu'un avec bordure de fleurs et le fond semis avec des fleurs moyennes; les autres selon votre goût, mais pas de carreaux car ces morceaux que je vous envoie sont seulement pour vous montrer le genre. Il nous faut les dessins à deux couleurs, c'est-à-dire, rouge et blanc, blanc et jaune, jaune et rouge, mais toujours en fond noir.

And in another letter to Schmidt:

Consequentment a votres demandes j'ai l'avantage de vous faire nouveau commande de 4 dessins en fond rouge sur l'style du dessin n. 7 plus 3 dessins par l'ordre de l'échantillon ci-inclus, prenant garde du style de fabrication, car comme vous voyez le blanc est obtenu par moyen de l'acide.



L'Espanya Industrial installation at the Universal Exhibition [Libro del Centenario (1847-1947). *La España Industrial*].

The success of *l'Espanya Industrial*'s products was mainly due to the fact that the firm followed the trends introduced in France. This practice sometimes came in for criticism in Barcelona, on the grounds that the design did not take local art as its model. The abundant correspondence with foreign draughtsmen often requested above all, *designs of the utmost novelty* – that is, ones that follow the trends of Paris or Mulhouse. The factory was anxious to receive the drawings as soon as possible, in order to keep ahead of the strong competition at home.

A great showcase

5 *Libro del Centenario* (1847-1947). *La España Industrial*. Barcelona: La España Industrial, 1947, p. 65.

6 *La España Industrial. Sociedad Anónima en su 82º aniversario* (1847-1929). Barcelona: La España Industrial, 1929, p. 30

The Universal Exhibition was the showcase where the company displayed its most valuable products. In 1888 *l'Espanya Industrial* produced fabrics of all kinds, including printed corduroy; in fact, this latter production increased in volume in the following decade, and by the turn of the century the firm was known best for its corduroy rather than its prints⁵.

With a stand of 125 square metres described as “splendid and majestic”, *l'Espanya Industrial* aimed to show off the novelty and quality of its design. According to the reports of the time, the design was one of the most carefully nurtured features: “*the management of such an important company pays great attention to the artistic part of this industry, because the firm's success and its dominance in the markets is largely dependent on it*”⁶.

The installation was presided over by a tapestry printed with the traditional method of wooden blocks known as *motlles de bac*, which bore the design engraved in relief. It was a large tapestry depicting an allegory of the industry, inspired by a contemporary French piece created in praise of agriculture. It was hand-printed and made in imitation of the Gobelins works; the aim was to recover the magnificence of the ancient and complex traditional procedure,

Woodblock printed tapestry for the stand at the Barcelona Universal Exhibition of 1888. Design by Joan Rabadà Vallbé. MEPM 1214.
Photograph: Esther de Prades.





Commemorative handkerchief for the Barcelona Universal Exhibition of 1888. Design by Joan Rabadà Vallbé, MEPM. Photograph: Esther de Prades. [See detail](#)

now consigned to second place by modern mechanical printing cylinders. It was designed by Joan Rabadà, and wooden printing blocks were sent to J. Cholet in Paris, who made three copies in earthy colours. The tapestry was also displayed at the stand of the Paris Universal Exhibition of 1889, where the company won the Grand Prix and at the International Furniture Exhibition in Barcelona in 1923, where it earned the same award.

Following the Universal Exhibition a commemorative scarf was printed, a common occurrence at the time. Joan Rabadà made the design for the contest. The large scarf reproduces emblematic buildings from the exhibition, surrounded by angels and inscriptions.

The firm won two gold medals, one for plain and printed cotton yarns and fabrics and another for imitation tapestries. The motifs for clothing were mainly geometric or inspired by flora and fauna. The drawings of flowers and plants varied widely: many clothes reproduce roses and wildflowers in up to twelve different colours. The most common compositions were plants or silhouettes on dark backgrounds which have small branches with flowers and leaves and simple shapes. These clothes, mainly made for agricultural workers, used the *rongeant* technique. This type of printing created a light motif on a dark background. The garment was dyed black, brown or indigo and then the motifs were printed using the blocks or cylinders impregnated in the paste that removed the dye and created a new colour.

Printed twill with floral design.
C. 1888. Private collection.
Photograph: Assumpta Dangla.



7 DANGLA, Assumpta i DÒRIA, Mònica, “La transición a los colorantes sintéticos en La España Industrial”, *Datatèxtil*, no. 27, Terrassa, November 2012, pp. 42-55.

Among other motifs, we find life-size chestnuts, butterflies and insects, often in light colours on a dark background. There were also synthetic plant designs with the *coup de fouet* forms characteristic of *modernisme*, the Catalan *art nouveau*. In the case of the scarves, most were decorated with geometric shapes and floral borders. The motifs were outlined in black on a background of red and *nankin*, a unique yellow colour that mimicked the clothes of the region in China of that name.

Other new shades of colour were introduced at this time. In fact, the colour room of *l'Espanya Industrial* incorporated new dyes as they were discovered. From 1856, when the first synthetic dye was created, the factory replaced by natural and artificial dyes with dyes made in the laboratory. The 1880s were marked by the coexistence of the three types of dyestuffs – natural, artificial and synthetic. As the decade progressed the use of synthetics increased, and by the end of the century they had virtually replaced the traditional ones⁷. The result is clear to see in the clothes of the period, with a new, much wider range of colours.

Fabrics for upholstery especially reproduced plant motifs and floral compositions with large *rappports*, or scenes with human figures, often inspired by literature. At the time, it was common for fabrics to reproduce scenes from a novel or an opera libretto. This tradition had been in force since the eighteenth century, when the French *toiles* represented literary themes. Following the publication of a book or the performance of an opera, an artist would paint

8 SERRATE, Jose M. Et altri, *Estudios completos sobre la Exposición Universal celebrada en Barcelona el año 1888*. Diairo Mercantil. Barcelona 1888 p. 362.

a picture that would be shown in a *salon*; then, an engraver would use the picture as the inspiration for a print, which would be copied by designers. This sequence is followed in textile printing during the nineteenth century as well.

The exhibition was a success and aroused great interest; orders soared and the display fulfilled its purpose admirably. The firm also received offers from designers asking for work. The exhibition was attended by professionals of all specialities and suppliers and served as a venue for a fruitful exchange of knowledge. The chronicle of the time reported the event as follows⁸:

“This powerful company which sets immense capital in motion, which employs thousands of workers, and which accommodates in its vast and grandiose buildings all the advances in the field, indisputably marches on at the head of the Catalan printing industry. It has recently renewed all its machinery, and can claim with confidence to be an industrial and commercial centre at the level of the most famous in Europe”.

Despite its dependence on abroad, *l'Espanya Industrial* was also able to innovate and create its own products thanks to the imagination of the technical staff at the factory. This allowed the firm to keep ahead of its competitors; this was especially true in the last years of the century, when it stood out from the rest of the field thanks to the use of new special fabrics like flannel and corduroy, and printing in colours or in gold and silver. ●