

Dyes, chemistry and the path to the chemical industry

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The ribbon industry's need for dyes created a trade and a craft that would prepare the most important industry of modern Basel. The Basel merchants imported natural dyes from all over the world: indigo from India and the Americas, cochineal from Mexico, madder from the Netherlands and the Levant, logwood and brazilwood from the Caribbean and South America, weld and saffron from Europe. Besides selling these dyes to the dyers of the city and the region, some of them specialised in the trade of dyestuffs, drugs and chemical products, the *Materialwaren*, as they were called.¹

One of these merchants was Johann Rudolf Geigy, who in 1758 established a business in Basel dealing in materials, chemicals, dyes and drugs of all kinds. His descendants continued the business. In the nineteenth century, when synthetic dyes were discovered, the Geigy firm began to produce them. The company J. R. Geigy became one of the pillars of the Basel chemical industry before becoming, after a series of mergers, part of Ciba-Geigy in 1970 and of Novartis in 1996.² The line from the dye merchant of 1758 to the global pharmaceutical group of today is one of the most remarkable continuities in the economic history of any city.

The discovery of synthetic dyes in the 1850s, beginning with the mauveine of William Henry Perkin in London in 1856, transformed the dye trade. Synthetic dyes, derived from coal tar, a waste product of the production of gas for lighting, offered brighter colours, greater consistency and lower costs than natural dyes. The Basel dye merchants and dyers, who knew the market for dyes and had the capital to invest, were well placed to take advantage of this discovery. In the late 1850s and 1860s, several Basel firms began to produce synthetic dyes, among them the firm of Alexander Clavel, a silk dyer from Lyon who settled in Basel and began producing fuchsine in 1859. His business became the foundation of the company later known as Ciba.³

The Basel chemical industry thus grew directly out of the silk ribbon industry: from the need for dyes, from the knowledge of dyeing, from the capital of the ribbon merchants and from the market connections they had established. Part D examines the development of this industry and its transformation into the pharmaceutical industry that dominates the Basel economy today. The ribbon industry, which declined in the late nineteenth century, left behind a successor that would surpass it by far.

1 Notes

1. On the trade in natural dyestuffs (Materialwaren, Farbwaren) in eighteenth-century Basel, see the literature on the origins of the Basel chemical industry. To be verified. ↩
2. On the foundation of the Geigy business by Johann Rudolf Geigy-Gemuseus in 1758 (trade in materials, chemicals, dyes and drugs), its development into J. R. Geigy AG, the merger with Ciba in 1970 and the merger of Ciba-Geigy with Sandoz to form Novartis in 1996, see HLS, article "Geigy"; the company histories. To be verified. ↩
3. On Alexander Clavel, a silk dyer from Lyon who began producing fuchsine in Basel in 1859, and the development of his business into the Gesellschaft für Chemische Industrie in Basel (Ciba, 1884), see HLS, articles "Clavel, Alexander" and "Ciba". To be verified. ↩

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