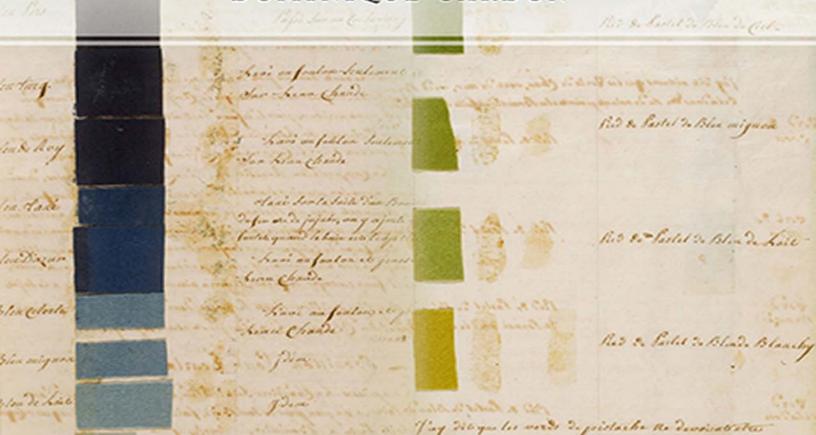


The Dyer's Handbook

MEMOIRS OF AN 18TH-CENTURY
MASTER COLOURIST



DOMINIQUE CARDON



ANCIENT TEXTILES SERIES VOL. 26

THE DYER'S HANDBOOK

Memoirs on Dyeing by a French Gentleman-Clothier in the Age of Enlightenment translated and contextualised

Edited by

DOMINIQUE CARDON



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Front cover: The spring of Las Fons (D. Cardon); a page from the original manuscript of Mémoires de teinture

Back cover: [to be filled in later]



For my dear friends and family in the British Isles and North America

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Foreword

The core part of this book is the translation into English of the text of a French manuscript, *Mémoires de teinture* (Memoirs on Dyeing), the critical edition of which was published recently.¹

The manuscript is privately owned, and only one copy is known to exist. It is fragile and beautiful; the descriptions of dyeing processes contained in it are illustrated by samples of fine broadcloth dyed in the corresponding colours. This single French edition was the sole medium from which to make the memoirs accessible to the public.

This volume includes a translation of the original manuscript, with the addition of a number of essays that I hope will put this exceptional document in its historical, economic, technological contexts.

For those historians who have long been fascinated by the change in scale and the amount of innovation that occurred in woollen cloth production in Europe during the 17th and 18th centuries, the *Memoirs on Dyeing* brings first-hand insight into the daily preoccupations and tasks of a key actor in the success story of the Languedocian broadcloth production specially devised for export to the Levant. Even non-specialists may be interested in understanding the clever management and technical organisation that made it possible for the author's manufacture to produce, dye, finish, pack and export up to 1,375 pieces of superfine broadcloth per year, representing nearly 51 km of cloth of an estimated total weight of about 15,000 kg. Per day, it implied dyeing a minimum of eight half-pieces of cloth, each measuring 15 to 17 ells (18 to 19 metres) in length and that's without counting any holiday off.

The *Memoirs on Dyeing* also contribute new elements to clarify important technological issues about the competition that took place between the textile centres of Venice, the Netherlands, England and France to conquer the vast markets of the Ottoman Empire and beyond. The author's and his Languedocian colleagues' best rivals at the time being the English clothiers of the West of England, I have started a research into their archives, pattern books and dye books, which will, of course, have to be continued, but has already allowed me, in this book, to propose some comparisons between the production systems in these two regions of Europe, each with a long tradition of wool weaving and dyeing.

My interest in these colourful documents is not purely historical. I hope that this book may be of use, not only to readers with an interest in economic history and in the history of techniques, but also to the growing numbers among the young generation of colourists, designers and dyers with a keen interest in the colours of the past. Some may want to revive them, as a natural and essential part of the new conception and production process emerging with the "Slow Fashion" movement. Others may simply use them as an inspiration for new colour trends.

It is with such uses in mind that the present book has been planned. Its dimensions in height and

width not being too much reduced compared with the dimensions of the original document, the colour plates of all the pages of the manuscript illustrated with dyed textile samples can do full justice to the beauty of these colours miraculously preserved for us since the 18th century. Thanks to the corresponding recipes, and to the conversion of their *Ancien Régime* quantitative data into metric figures provided, they can be reproduced exactly, with the same ingredients. Alternatively, the same shades can be reproduced by dyers and colourists with any colorants – either natural of synthetic – they may wish to use, because they can match the results of their experiments with the coloristic definitions of the samples in the *Mémoires de teinture*. Colorimetric measurements have been performed by Iris Brémaud, scientific researcher at the *Laboratoire de Mécanique et Génie Civil*, CNRS (National Centre of Scientific Research), University of Montpellier 2, on all the samples preserved in this document. The results are published as CIE L*a*b* data at the end of the book.

Imagine. Colours of the past, escaping from the pages of old dye books and pattern books. Persian blue, raven, dainty blue, pomegranate flower, spiny lobster, winesoup, pale flesh, dove breast, golden wax, grass green, green sand, rotten olive, modest plum, agate, rich French gray, gunpowder of the English, finding their way to the streets of our cities, enlivening everything we wear, all allied to dissipate the bleakness of the times. "You may say I'm a dreamer" – historians do like to think that understanding the past can inspire the future.

Note

1 Cardon, D. (2013) Mémoires de teinture – Voyage dans le temps chez un maître des couleurs. Paris: CNRS éditions.

Part I

A new life for a mysterious manuscript

In Search of an Author

First encounter

My story starts a few years ago in the south of France, at a dinner party in Montpellier, a city famous for its early medical school and university with long history of research into plants and their uses. During the dinner, an eminent albeit retired professor of botany and pharmacology happened to be sitting beside a historian friend of mine. Neither remembered how their conversation induced the professor to mention an extraordinary manuscript in his possession. It had been handed down through his family and – said he – supposedly originated from an ancestor who was a clothier in the 18th century. What made the document so special was the world of colours revealed in its pages, illuminated by 177 samples of fine broadcloth, dyed in all the hues of the rainbow, glued to the paper in front of nearly all the recipes. Being quite old and having just been told he was seriously ill, the professor felt he would like to have the manuscript examined by a specialist who could assess its historical value and the usefulness of planning its publication. Ancient textiles, natural dyes – my interest in such fields being pretty widely known locally, in a matter of days I had been alerted, put into contact with the professor, and found myself ringing at his door bell in one of the beautiful medieval houses in the historical centre of the city.

What awaited me inside was a courteous and kind welcome by the professor and his wife. After some polite talk, revealing their earnest interest in historical research, they brought me the manuscript, kept in a drawer of the professor's desk: a high, thin notebook with a frail, partly torn, cream-coloured paper cover. I opened it – or rather, it opened itself – at the middle page: on both left margins, a column of colour names; just beside, petals of thin, velvety cloth of different shapes and shades of green corresponding to each colour name, compellingly named: black green, dark green, obscure green, duck green, grass green, emerald, parrot, light green, gay green, nascent green...

Facing these swatches, on the right column of either page, were the author's explanations on how he had made these hues. For each special shade of green sample, the exact degrees of woad and indigo blue ground necessary to obtain it were clearly defined. As the professor had said, all the pages of the memoirs similarly bloomed with delightful assortments of vivid or subtle colours and detailed recipes for their creation.

That summer afternoon, I fell in love with the document and resolved to publish it so that it could be shared with other lovers of colour. Our common enthusiasm for this beautiful project, I like to think, brought some light into the ensuing painful period of illness that befell the professor, ending in his death. The recent publication in French of the scholarly edition of the manuscript, after several years

Betrayed by a spring

Immediately after the first enchantment at discovering this extraordinary document, came an overwhelming sense of the difficulty of the task involved in trying to understand by whom it had been written, and why. The manuscript is anonymous, no date is to be found anywhere in the text, nor any mention of a known place name that could help locate precisely where it was written. True enough, in the very first page of the manuscript, the author defines both the technical and geographical limits of his work: he is only writing – he warns – about "the dyes that we make in Languedoc for the Levant". But this is not very helpful in terms of location. The wealth of historical studies that have been dedicated to the planned revival and development of the woollen industry oriented towards Eastern Mediterranean markets in 17th–18th century Languedoc, has revealed how widespread the production centres were all over this vast province, then stretching from the River Rhône westward, nearly to the outskirts of the Pyrénées mountains and the border with Spain (Fig. 1.1). How could one guess where to start looking in Languedoc without further clues?

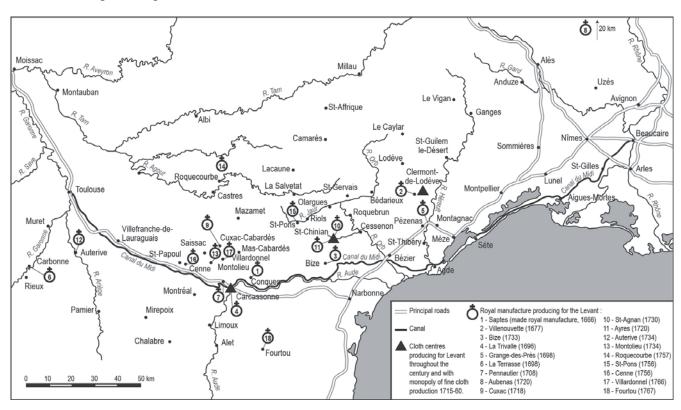


Fig. 1.1. Textile centres in Languedoc exporting broadcloth to the Levant in the 18th century. Map K. Mercier/D. Cardon, CNRS, CIHAM/UMR 5648, after J.K.J. Thomson, Clermont-de-Lodève 1633–1789 – Fluctuations in the prosperity of a Languedocian cloth-making town. Cambridge, Cambridge University Press, 1982, frontispiece.

Well, there is a hint, but it only appears in the last of the four memoirs. There, the author announces that he is going to complete the methodical presentation of "all the colours that are done for the Levant", which he has offered in the second memoir, by a record of the results of his personal experiments to improve some dyeing processes or to create new colour shades. This naturally induces

him to give some details on the practical conditions in which he conducts these experiments, starting, as one would expect, by comments on the quality of his water resources, so vital for a dyer. This is how at last, at page 80 of the manuscript, the author reveals that the place where "his colours" are produced is a Royal Manufacture that, he explains, has two different water supplies. For dyeing and washing the cloths, a river that receives additional water from a group of springs a short distance upstream is used; another spring is directed to a fulling mill. The name of the Royal Manufacture he does not mention, nor that of the river that flows by, and the name he does mention for the springs upstream that flow down into the river, "Las Fons", is not very telling since it just means "The Springs" in the local Occitan language. Which leaves only one hope of identifying the place he is writing from: the name of the other spring, "La Bouilhete", whose water he disparagingly describes as "molasse" – or "softish".

Locating a spring with that name in the hydrographic network of a whole province: one might expect it to be about as easy as looking for a needle in a haystack. It actually turned out not to be as hopeless as it appeared. To begin with, the simple mention that the author worked in a Royal Manufacture allowed to significantly restrict the research: on the 26th January 1735, the *Etats du Languedoc* (the assembly of the representatives of the Estates of the Province) had "definitively" limited the number of Privileged Royal Manufactures to no more than twelve.² Although six more Royal Manufactures – not Privileged – were actually created after that date, it wasn't necessary to extend our search to encompass them.

Indeed, thanks to a network of volunteers, all particularly knowledgeable about the natural environments and local history of the region, within a year the place was found where a spring called La Bouillette still exists (Fig. 1.2) – although it more and more frequently dries up, like many other springs in Languedoc. In that same place, a river, the Cesse, flows right at the foot of the high walls of a former Royal Manufacture (Fig. 1.3), and a few miles upstream, a group of springs below the paleolithic caves of Las Fons mingle their tepid waters in a whirl of bubbles at the bottom of a mossy rock basin, before overflowing into the river (Fig. 1.4). The place where all these sources of water can be found is a small town, Bize-en-Minervois (in the present department of Aude). Its broadcloth manufacture was raised to the status of Privileged Royal Manufacture in 1733.³

The "molasse" Bouillette had taken its revenge by proving crucial to identify the place where, in all probability, the author was working and writing. This marked a real breakthrough because it gave significance to the few clues scattered in the text about the approximate time when the Memoirs were written. Cross-referencing these pieces of data on place and time of writing of the Memoirs then logically led to a hypothesis about the author's identity which proved unerringly coherent with the contents of the text. Happily, it further opened a fascinating insight into the social context and historical conjuncture in which the author and his peers were striving not only to keep their manufactures afloat, but to make as much progress as possible in terms of quality as well as quantities, most of them obviously moved by a true passion for this branch of industry which they looked upon as a form of art.

On the other hand, the identification here proposed for the author has just added more mystery to the story of the manuscript. While the ancestor from whom the present owners thought it was inherited had indeed been a clothier in the 18th century, he apparently had no known connections in Bize, his factory was located in a different part of Languedoc and it never figured among the prestigious Royal Manufactures.

Because the circumstances in which the manuscript was integrated into the family's archives still are an enigma, and as a token of respect for what seems to have been the author's will to remain anonymous, since he neither signed his *Memoirs on Dyeing*, nor mentioned the name of his manufacture, I shall keep just calling him "the author" in the following chapters, in which I endeavoured to situate the translation of his text it in its technological and historical context.

In reality, however, identifying the place where the author was writing as the Royal Manufacture of Bize, narrowed down the possibilities until one person stood out as the most likely, both to have possessed the capacities and to have been in a position to write such a masterpiece of technical literature.

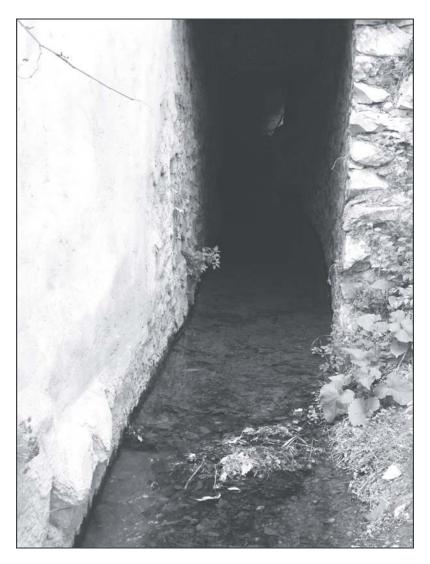


Fig. 1.2. Water course from the spring of La Bouillette to the former fulling-mill of the Royal Manufacture of Bize. Photo D. Cardon.

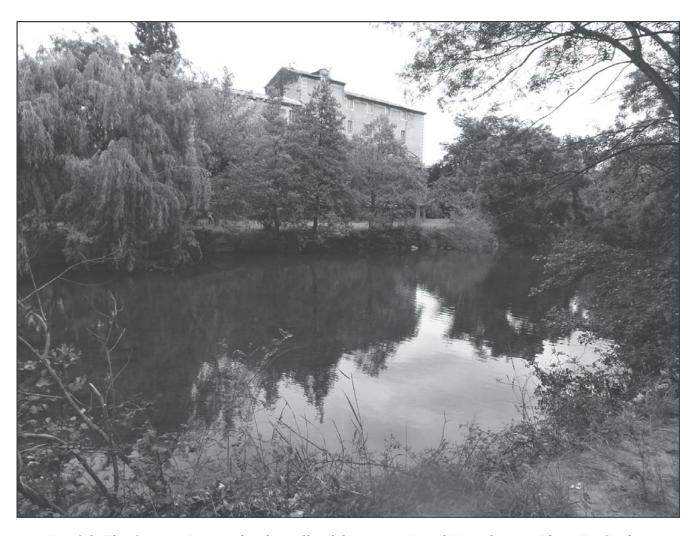


Fig. 1.3. The Cesse in Bize, under the walls of the ancient Royal Manufacture. Photo D. Cardon.

Spreading branches, deep-rooting

Assuming that the *Memoirs on Dyeing* were written in Bize, the next, and more difficult, step towards identifying the author was trying to understand in what period of the eventful history of the manufacture the composition could have taken place.⁴ Not a single date figuring in the text, it was the author's flirt with plagiarism in his first memoir, the *Memoir on dye drugs*, that helped. There, the author felt he should complete the records of his personal knowledge of the mordants and dyestuffs which he was accustomed to use by some more general information on their provenance. This he looked for in the copious popular scientific and technical literature, issued year after year in that Age of Enlightenment. Without acknowledging it, he copied whole passages from different sources including the famous *Encyclopédie*, *ou Dictionnaire raisonné des Sciences*, *des Arts et des Métiers* (Encyclopaedia, or a Systematic Dictionary of the Sciences, Arts, and Crafts) by Denis Diderot and Jean d'Alembert, and also, fortunately, from less well known books including strange stories inherited from medieval almanacs and "books of secrets", in which characteristically misspelled names betray the original source.

The two latest publications that could be identified in this way as having been "recycled" by the author in his *Memoirs* turned out to be the *Dictionnaire du citoyen*, ou abrégé historique, théorique et pratique du commerce (The Citizen's Dictionary, or abridged historical, theoretical and practical

Dictionary on Commerce) by Honoré Lacombe de Prézel, published in 1761, and the *Dictionnaire domestique portatif, contenant toutes les connoissances relatives à l'oeconomie domestique et rurale* (Portable Domestic Dictionary, including all knowledge related to domestic and rural economy), by Roux, Aubert de La Chesnaye-Desbois and Goulin, published in 1762. Therefore, it became clear that the *Memoirs on dyeing* could only have been written after 1762. More precisely and most probably, the author may have been working on the manuscript during the two or three ensuing years. This can be deduced from two mentions he makes in the same *Memoir* about the economic consequences of the Seven Years' War (1756–1763) on his trade; at page 4, he still complains about the considerable rise in the price of Rome alum in the previous years, while at page 10, he can already point to a beginning of decrease in the price of cochineal which had soared, obviously due to the disruption of sea trade routes. He may therefore be writing toward the end of the war or just after it, to make good use of the spare time imposed to him by the slack in business, and before the boom in broadcloth production that, in Languedoc, followed the end of the war.⁵



Fig. 1.4. The spring of Las Fons. Photo D. Cardon.

The *terminus post quem* of 1762 is particularly important because, from this date to the moment it had to close down, at an uncertain date during the French Revolution, the Royal Manufacture of Bize constantly remained a property of the "Pinel group" from Carcassonne, while it was all that time directed by an *entrepreneur* to whom the Pinel family had entrusted its management in 1757. There is therefore a very high degree of probability that this one man, Paul Gout, is the author of the *Memoirs*.

During all these years, Paul Gout was the only person who lived permanently in the Manufacture in Bize, managing the production, organising and supervising all operations in the dye-house. He alone was in a position to complain about the water resources of the Manufacture, and above all, to feel free to cut off samples from the cloths as they were coming out of the press.

The position of *entrepreneur*, executive manager of the factory, was as crucial from a technical point of view as prestigious in terms of social status in 18th century Languedoc. There were good reasons for Paul Gout to have been chosen by Germain Pinel, then the head of a powerful family of businessmen and clothiers from Carcassonne including Germain's younger brothers and later his nephews.⁶ Gout had already had the opportunity to reveal his talents and to be distinguished by the family when he was entrusted with the responsibility of replacing François Pinel as manager of another Royal Manufacture, that of Saint-Chinian (about 17 km north-east from Bize), when Pinel decided to go back to live in Carcassonne, at the end of 1754.⁷

At Saint-Chinian, between September 1754 and 1756, Paul Gout makes a good start, easily maintaining the level of production decreed by the government for all Royal Manufactures. According to the Fixation System, intended to distribute production quotas fairly between clothiers and to prevent the glutting of the Levant markets, each Royal Manufacture was allowed a maximum of 420 pieces of the type of cloth, named *Londrins Seconds*, per year.⁸ As soon as the Fixation System, unpopular among many clothiers, was abolished in the course of 1756, Gout immediately reacted and started intensifying and speeding up all operations, to reach an output of 450 pieces before the end of the year.

At the beginning of 1757, however, he had already moved to Bize where he took over after Jean Mailhol, a former independent clothier who had managed the manufacture for the Pinel family during the previous years.⁹

Paul Gout's rapid professional ascension may be explained by old links with the Pinel family. He came from a family of small clothiers and cloth-workers in Carcassonne, most of whom belong to the same parish as the Pinels, St Vincent Church, in the heart of the wool-working district of the town. In the 1720s, presumed period of Paul's birth and prime youth, several babies with fathers named Gout described as marchand-drapier (clothier), pareur (cloth-finisher), marchand-teinturier (master dyer) or just teinturier (dyer) are christened there, and so are François Pinel in 1725, and Louis in 1726.¹⁰ Though no mention of a Paul Gout could be found in the parish registers, this is not conclusive, since many pages are too damaged to be legible. As a boy among the wool workers of Carcassonne, Paul may well have already been distinguished as bright and promising by Pierre Pinel, the founder of the dynasty, or later by his sons. He certainly worked as commis (assistant, clerk) for François Pinel at Saint-Chinian for several years before succeeding him as the manager of the manufacture. 11 The years he spent there were very fruitful, giving him the opportunity to become acquainted with Antoine Janot, a commission dyer of the town whose expertise was widely respected and who left several memoirs on various aspects of the art of dyeing, including a beautiful dye book illustrated with samples of Londrins Seconds. 12 There also, Paul met his future wife, demoiselle Marie Bonnefous, who happened to be the daughter of Barthélemy Bonnefous, the director of the other Royal Manufacture at Saint-Chinian, the Manufacture of St-Agnan.¹³

Paul Gout got off to an excellent start at Bize. From 785 pieces of *Londrins Seconds* produced during the last year of Jean Mailhol's management, the output rose to 860 pieces in 1757.¹⁴ But the following year, "*les derrangements que cause la guerre*" – the disruptions caused by the Seven Years'

War – hit the trade to the Levant and the clothiers and their workers in Languedoc. At Bize, production declines to 760 cloths in 1758. Reacting at once, with the commercial flair which ensured his long-term success, Gout is one of the two first entrepreneurs producing for the Levant market to face the difficult conjuncture by trying to open new markets, diversifying his production with small quantities of both superfine and middling fine cloths.

In 1759 the economic situation worsens, and the production of *Londrins Seconds* drops further to 735 pieces at Bize. However, Gout holds on and turns to the King's Intendant in Languedoc to ask for the permission to revive a type of cloth called *Nims*, made with cheaper Spanish or local wool, which had provided the Royal Manufacture at Bize with good outlets in earlier years, but had been disallowed later on. On the 8th of February, he justifies his request in a letter to the Intendant: "I intend to attempt this production in the hope of faring less badly with it than with the Londrins Seconds on which I have been losing very much money since I have managed this Manufacture". The Intendant flatly rejects his request. Instead of bowing down to this decision, the young entrepreneur immediately challenges it in an indignant answer to the Intendant: "After the immense losses I have been suffering in my business for the past years" - a slight exaggeration - "and after exhausting myself to support my workers", he cannot admit not to be "permitted to make use of the only way which is left for me to-day to provide for their subsistence". He even threatens to go over the Intendant's head and directly appeal to the social conscience of the Minister: "It appears to me that the major part of the workers of this province having no work to-day, the Minister should be grateful to those manufacturers who give them employment. This is my motivation. I dare hope, My Lord, that you will find it fair, and that you will spare me turning to Mr. the Controlleur Général to obtain the said permission". Gout ironically ends his letter with the flowery formulas typical of the century: "I have the honour of being with respect, My Lord, your very humble and very obedient servant" (Fig. 1.5). 15

The case actually does go all the way up to the minister, Daniel-Charles Trudaine, but through the administrative channels. Some information on the bold protester is requested and the Inspector of Manufactures in charge of Bize admits that "this entrepreneur is intelligent" but does not conceal his doubts "that he exactly conforms to the rules". The result is that as from June 1759, Gout is allowed to produce 40 pieces of *Nims*, which will be registered in the statistics for 1760 as *Londres Larges* (a type of cloth technically close enough) to avoid openly admitting such breach in the rules. That year, he also regains confidence in the economic prospects for *Londrins Seconds*, producing exactly 900 pieces, and makes a new attempt at diversification by launching the production of 50 pieces of *Londrins Premiers*, the quality of cloth immediately superior to the *Londrins Seconds*.

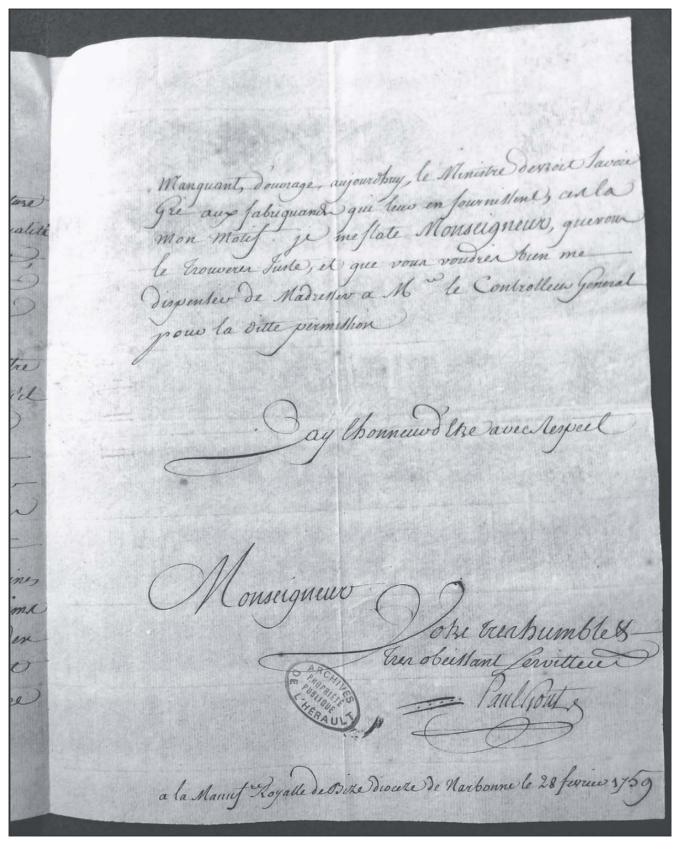


Fig. 1.5. Letter from Paul Gout dated 28th February 1762 to Monsieur de Saint-Priest, Intendant in Languedoc. AD34 C 5550 doc. 17. Photo D. Cardon.

The following years are at least as productive, in more than one respect: in September 1761 his first son, Barthélemy Paul, baptised in Bize church, is registered as "the son of Mr. Paul Gout director

of the Royal Manufacture" in the parish book. The boy's godfather is none other than his maternal grandfather, Barthélemy Bonnefous, "director of the Royal Manufacture of Saint-Chinian". In May 1763, a second son, Guillaume, is born and Paul Gout is again described in the parish register as "director of the Royal Manufacture". If indeed he was the author of the *Mémoires de teinture*, couldn't it be the birth of these two first sons – potential successors in the trade – that gave Gout the incentive to prepare such treasure of technical information for them? As discussed earlier, this is the time around which the writing of the manuscript may be dated.

In any case, Gout goes on working hard for the prosperity of his growing family. The Manufacture produces 825 *Londrins Seconds* and 48 "superfine" cloths in 1763, the output reaching a record of 1255 pieces of *Londrins Seconds* plus 120 superfines in 1764.

Such truly impressive figures certainly serve as a warning not to underestimate the efficiency of the woollen cloth industries that flourished in many parts of Europe long before the Industrial Revolution. In the essays that follow the translation of the *Mémoires de teinture* in the present book, the technical implications of such huge production will be examined in detail from the point of view of the management of dyeing processes. For the time being, suffice it to point out that dyeing 1375 "double" pieces of cloth in a year (hardly any were sent in the "white" or undyed state) actually meant handling a minimum of eight "half" pieces measuring 15 to 17 French ells (18 to 19 metres) in length per day.¹⁷

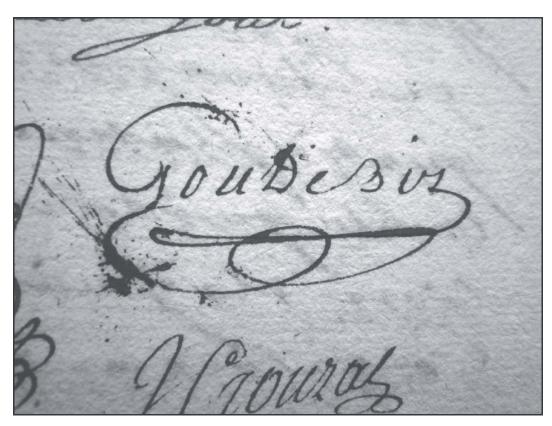


Fig. 1.6. Paul Gout's signature in the itemised inventory established after Germain Pinel's death, dated 21 March 1774. AD11 3 E 1246. Photo D. Cardon.

On the 12th of May 1766, on the baptism certificate of his third son Jean-Joseph (who will not be his last), Mr. Paul Gout is for the first time mentioned as "coseigneur de Bize". He signs his newly acquired name "Gout de Biz" (Fig. 1.6).¹⁸

Gout had become a "gentleman-clothier",¹⁹ one of the four joint squires of Bize, following in the steps of Germain Pinel, owner of the Manufacture, already mentioned as *coseigneur* of Bize in the *compoix* (land register) for 1761.²⁰

"Gout de Biz"

Ridiculous snobbery; exhilaration in the fulfilment of a child's dream to raise above his initial condition and integrate the ranks of the gentry; proud display of a well-deserved social success based on merit: all such interpretations may be proposed, depending on the observer's viewpoint. What is certain is that the case is by no means isolated at the time, either in France or in England.²¹ In both countries, the manufacture of woollen cloth for export to the Levant was one of the best ways to facilitate upward social mobility. This is particularly true of the management of a Royal Manufacture in 18th century Languedoc, and it does not only apply to owners-capitalists but also to the *entrepreneurs*, their executive managers. "*Négossients… fait icy noblesse*" ("Merchants-clothiers… here pass for gentry") – sneered a captain in the King's army visiting the broadcloth-producing diocese of Lodève in 1749.²²

A quarter of a century earlier, Daniel Defoe offered a similar picture of the West of England society: "many of the great families, who now pass for gentry in these counties, have been originally raised from, and built up by this truly noble manufacture". The external signs of such change in status did not pass unnoticed: "ce n'étoit alors que peruqués" ("there were but wigged people around in those days"), a former clothier from Clermont-Lodève remembered in 1782. In 1751, Pierre Gout from Carcassonne (Paul's father, uncle or cousin?) mocked his fellow clothiers, "poudrés à blanc et le commis aussy comme le maître" ("white-powdered, the clerk just like the master") among whom "beaucoup... qui ne sont pas connoisseurs" ("many that are not connoisseurs") in the trade. 25

The last criticism assuredly could not apply to Paul Gout. The addition of the name of the place where he worked to his patronym should best be viewed as the ultimate sign of his deep and sincere commitment to his task. By signing Gout de Biz, he declared himself a man who had not only found his way in life but also the place where he could best express the *supériorité de lumières* (superior enlightenment) he had obviously been born with, and which was judged indispensable by an inspector of manufactures for a successful career of cloth manufacturer.²⁶ The manufacture of Bize was the instrument Gout chose to create colour symphonies composed of thousands of cloths dyed in all colour hues, and he conducted it like an orchestra for more than thirty years, with unfailing inspiration.

Capitalists and entrepreneurs: a successful symbiosis

Superior intelligence, thorough technical expertise, acute feeling for textile and colours: none of this, however, would have been enough to ensure the ongoing success of the enterprise, in that second half of the 18th century, a difficult epoch of "crise permanente larvée" ("permanent latent crisis")²⁷ in the cloth trade to the Levant, which saw some going bankrupt while others prospered (Fig. 1.7). If the Manufacture of Bize managed to fare well through the recurring episodes of glutting of the markets in the Levant and maintain a level of production (Fig. 1.8) that put it in second position among the Manufactures of the Carcassonne area,²⁸ it definitely was thanks to the large amounts of capital invested in the Manufacture by the Pinels, particularly by Germain who, when he died in 1774, left a fortune estimated at about 1,600,000 French pounds.²⁹ Paul Gout could further benefit from

preferential prices for buying Spanish wool, cochineal, indigo and alum, all major commodities in the very diversified international trade carried on within the Pinel group.

Too busy managing this considerable business from his headquarters in Carcassonne, Germain Pinel could not live in Bize, but he always showed a keen interest in his Manufacture. In May 1769, when the *loyer des Manufactures royales* (an annual government subsidy of 3,000 pounds per privileged manufacture) is threatened of suppression,³⁰ he personally writes to the *syndic* (representative officer) of the *Etats de Languedoc* to protest against the project, demonstrating the social impact of the Manufacture of Bize and stressing the importance of the financial investment implied:

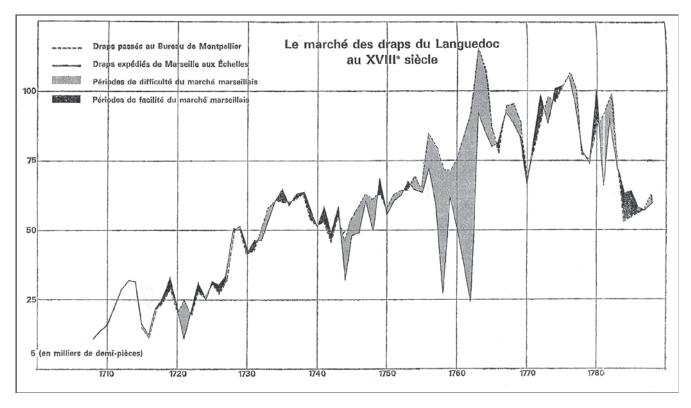


Fig. 1.7. Trends in the market of Languedocian broadcloths produced for the Levant in the 18th century. The dotted line corresponds to numbers of cloths controlled in Montpellier; the full line, to numbers of cloths actually exported from Marseilles to the Levant. (Figures in thousands of finished pieces.) The grey zones indicate periods of difficulty in finding outlets, the black zones, periods of easy selling. After M. Morineau and Ch. Carrière, "Draps du Languedoc et commerce du Levant au XVIIIè siècle", Revue d'Histoire économique et sociale, 56, 1968, p. 117.



Fig. 1.8. Production of the Royal Manufacture of Bize during the "Gout era" (1757–1789). Numbers of pieces of Londrins Seconds cloths. Data for 1788 are missing in source, AD11 9 C 31. Graph D.

Cardon/I. Brémaud

"It is of real usefulness, since I have very much augmented its buildings and the number of workers in the place, all the countryside around it is kept busy by the employment I provide, not only for the Levant but for many other markets. Since 1732, the year when I have become its owner, I have been maintaining it by my money, by my associates and by my clerks... it produces broadcloths of superior quality... and in spite of the present bad state of trade, this Manufacture has never been so busy... I have as many as 50 broad looms beating in Bize." ³¹

His commitment must have much contributed to strengthen his links with Paul Gout.

When Germain Pinel dies in 1774, one year after his only son Pierre, Gout collaborates with Germain's brother Louis Pinel to provide all necessary information to the notary who comes to the Manufacture to proceed to the itemised inventory of the estate. He clarifies what belonged to Germain and what is his own in the house as well as in the workshops and mill. This inventory shows what degree of intimacy reigned between the two families, who did not only share the premises but even objects of daily life: in the office where Gout works every day and Germain often came, nearly all the furniture belongs to the latter. But on the upper floors, in nearly every room, after a list of furniture, curtains, bedspreads, lamps and decorative knick-knacks described as Germain Pinel's, the inventory ends in the repetitive remark: "all the rest belongs to Paul Gout". He also shares financial interests with the Pinel brothers through capital he has invested in the family's business. Many years after Germain's death, the firm "Gout de Bize, père, fils et Cie" in which his sons now young adults are his partners, figures in the *Grand Livre* (main account book) of the company "Louis Pinel et Cie" in connection with various dealings. 33

All these years of shared interests have built up such strong links between the Gouts and the Pinels that it is on an idyllic family scene, very much in the spirit of 18th century painting, that this brief biography of Paul Gout can best be ended. On the 2nd of April 1790, Zoé, Paul's first grand-daughter, is christened. She is the daughter of his eldest son Barthélemy Paul, now described in his turn as the "director of the Royal Manufacture of Bize" in the baptism certificate. The priest who baptises her is none other than one of Germain Pinel's grand-sons, François-Xavier, rector and pastor of the estate of Truilhas near Narbonne, who has come for the purpose. His brother, Messire Antoine Jacques Xavier Pinel de la Taule, "gentilhomme ordinaire du roi", has also come all the way from Paris to Bize to rejoice in the company of Gout de Biz and his wife Marie, who acts as her grand-daughter's godmother, and three of their sons – "Gout the elder", Zoé's father; "Gout the younger"; and another brother, Jean-Joseph – who "have all signed down together with ourself", the rector-pastor concludes at the end of the certificate (Fig. 1.9).³⁴

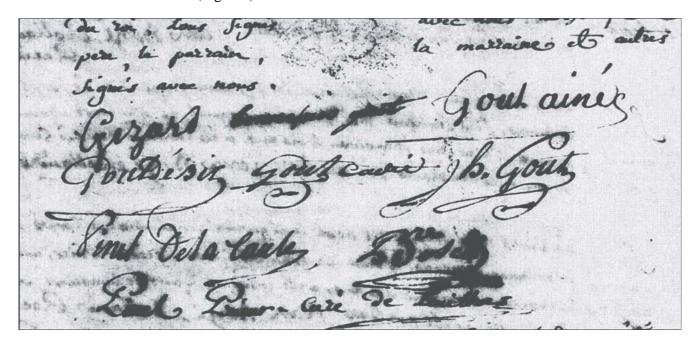


Fig. 1.9. Signatures of two of Germain Pinel's grandsons figuring with those of Paul Gout, his wife and three of their sons, on the certificate of baptism of "Gout de Biz's" first grand-daughter, Zoé, born on 25 April 1790 in Bize. AD11_5Mi0289_5E065_006_nmd_0003.

The Mémoires de teinture in context

One cannot but wonder how the director of one of those Royal Manufactures, busy with the to-ings and fro-ings of technical operations and the permanent flow of workers and goods, could find or take the time to write on dyeing. One could further find it surprising that he may have possessed the thorough knowledge of the art of dyeing necessary to undertake such a challenging task.

A first explanation lies in the crucial part played by the beauty and quality of the colours in the development of the Languedocian broadcloth production targeted to conquer the markets of the Eastern Mediterranean. At the time, no clothier, no inspector of manufactures, and certainly none of the factors in the Levant, has the slightest doubt about it. "The perfection of dyeing is as necessary as that of the construction of the cloth, it being the most considerable and essential finish that is given to the goods and it is the deficiency, or the perfection of this process that hinders their dispatch or makes

them easy to sell," declares an expert dyer from Carcassonne in 1731.³⁵ In his book *Le Parfait Négociant* (The Perfect Merchant), first published in 1675, Jacques Savary already stressed that "the Turks, the Armenians and the Persians are very demanding concerning colours... It is the vividness of the colours that makes them [the cloths] sell easily."³⁶ Moreover, the elites of these countries of colour lovers expect the producers from the other side of the Mediterranean to follow the fluctuations of the tastes and fashions of their different social circles with the utmost reactivity: "Above all, the assortments for the bales must be strictly observed concerning the colours, which change here nearly twice a year; one must take care to send new ones every six months," advises the author of still another memoir, written in the Levant around 1680.³⁷

Two merchants from Marseilles confirm the fickle nature of the market in a letter to the Intendant of Languedoc, dated 1757. They urgently request to be exceptionally permitted to export six bales of cloth bought from a clothier of Carcassonne who has already exceeded the export quota allotted him for that year by the Fixation System, otherwise these cloths "may fail to find buyers, due to the slightest delay that would cause their assortment to become old-fashioned". 38 Letters of English factors at Aleppo quoted by Gwilym Ambrose, though earlier, already show the same preoccupation for the correctness of colours: "I doe herewith send you a small muster of cloath, onely for the collour, which is here the first thinge desired," emphasizes one of them in October 1658; another in 1677 illustrates the fickleness of fashions in the Levant: "For colours I formerly sent home patterns of the choicest, what new colours may be now come or be best I cannot yet tell... if any particular colour be in fashion at Stambol you may expect 'twill be esteemed by the great ones here". "Persian colours", however, correspond to particular shades, "which I shall endeavour to sent the patterns of in my letter", writes another in 1699, adding "these Persian colours are only worn by persons of the best quality, who give a good price but wear only the finest cloth they can get". 39 The reactivity and expertise of dyers in Languedoc have been considered as key assets in the growing success of French cloth in the Levant.⁴⁰ They largely contributed to ensure outlets there that lasted longer, albeit on a reduced scale, than has been commonly assumed.⁴¹

To be considered as a good manager, the director of a Royal Manufacture was therefore expected to be knowledgeable about all aspects of dyeing, from technical processes and regulations to the latest technical improvements, real or claimed as such. Indeed, he needed to possess practical, technical expertise, especially since a dye-house most often was part of the factory and functioned under his direct supervision: "the entrepreneurs of Royal Manufactures that include dye-houses, employ dyers as workmen, but are expected to be their own master dyers," one inspector explains in 1745 to the Intendant of Languedoc. The problems that might arise from such direct involvement were being illustrated at that moment by a series of black cloths that had just been confiscated for their defective dyeing, the guilty dyers being further threatened of banishment from the trade. Two of them happening to be the entrepreneurs of renowned Royal Manufactures, the inspector expresses his feeling that "there is some difficulty in enforcing the exclusion penalty decreed by Mr. the Minister's letter."

The issue of the quality of dyeing is indeed a technical, economic and political matter. The *Mémoires de teinture* possibly represent the first published text that demonstrates this so clearly and this is what makes this document so unique and exceptionally interesting. It is not written by a commission dyer recognised for his expertise, working for the most prominent clothiers but not having directly to worry about foreign markets, like Antoine Janot's *Mémoire sur la teinture du grand et bon*