

Publication

Order in Publication

Robert Dossie was a rigorous advocate for the advantages of improved public knowledge. His training as an apothecary brought experience with chemistry to his understanding of the use of sciences to achieve this goal in artisan endeavors. Dossie's studies ranged wide, as fit his curiosity and his position, literally within the Society of Arts and more figuratively within its liberal community of artists, artisans, manufacturers, aristocrats, and folk. In addition to editing *Memoirs of Agriculture and Other Œconomical Arts* (3 vols., 1768–1782) for the Society, writing books on experimental chemistry and essays on potash and on spirits, Dossie compiled, tested and wrote about procedures and materials of that amorphous category "arts."¹ *The Handmaid to the Arts*, Dossie's publication of that information, instructs the reader in multiple techniques of painting and engraving, papermaking, and japanning. As a resource, it was well regarded by eighteenth- and early-nineteenth-century artisans and it continues to be a standard reference for practical techniques of that era.

[Authors of existing publications are] . . . for the most part unacquainted, in an experimental way, with what they took upon them to teach, and not better qualified with any speculative knowledge that could enable them to judge critically of what they procured on the authority of others. They therefore either blindly copied after former writers, or added implicitly such additional articles, and the reports of living persons they inquired of furnished them with, and were perhaps as often deceived by the design as the ignorance of those from whom they sought information being themselves possibly not always very solicitous so much about the value, as the quantity of what they collected.

Robert Dossie, *The Handmaid to the Arts* (London, 1764), 1:xix.

According to the preface of *The Handmaid to the Arts*, Dossie sought to improve consumer understanding of technical processes. A feature of the work, as he claimed in the preface, was that the contents were included on their merits, determined though experiment, rather than chosen because of inclusion in another, perhaps prestigious, earlier work. Dossie claimed to have tested each technique and recipe he included in *The Handmaid to the Arts*. This is probably an exaggeration, but he may have relied on guidance from experienced members of the amateur-artisan-manufacturer community at the Society of Arts. Dossie did vouch for the accuracy and value of the book's contents to a degree that those authors who merely compiled and did not test, or did not test so scrupulously, could not. *The Handmaid to the Arts* reflects its author's effort to take what would have been a useful publication and make it even more so, in this, it was not an anomaly. In the form given to it by Dossie, *The Handmaid to the Arts* also stands as an example of the regularized order appropriate to a good and useful publication that was widely accepted by mid-eighteenth century presenters and consumers of technical and scientific publications.

Urges to Simplify

PART VI.
The Art of Preparing Colours for PAINTERS, LIMNERS, &C.

I. Of BLUE – COLOURS

II. Of several RED COLOURS

III. Of all Sorts of Colours extracted from Flowers, &c.

IV. Of GREEN COLOURS

V. Of WHITE COLOURS

IX. [sic] Of several BLACK COLOURS

Godfrey Smith, Table of Contents (excerpt), *The Laboratory, or School of Arts* (London, 1739).

One change that can be charted through technical publications issued from about the middle of the eighteenth century is the standard, or at least regularized, formats that develop. Early printed works, even those focused on a single subject, provided little or no direction for the reader beyond a table of contents or index. Presentations often mixed descriptions of techniques with descriptions of materials or results. This format—or lack of format—may reflect an origin in daybooks or personal collections of information, for which order might be superimposed through a listing of the contents or an index once the volume was filled. Even when these earlier works had a recognizable structure, order and information presented were often inconsistent. Frequently, this was a result of the piecemeal enhancement of many early modern books. Later additions and supplements to an original work would result in repetitions and an overall disorder. Antonio Neri's *L'Arte vetraria* (first issued in 1612) exhibits this problem: An eighteenth-century example of the same might be Godfrey Smith's *Laboratory of Arts* (1738), a compendium of information, much of it translated from German. Eleven divisions are listed in the table of contents to Smith's book, but there are actually fourteen. The recipes are full of typographical and translation errors, adding further to the chaos.

In the course of the eighteenth century this was to change, so that, however much information a technical book might contain, and whatever subject its author claimed to present, the presentation became more consistent throughout. By the 1750s, it was common for authors or compilers to highlight the orderliness of the information, or at least for the authors to point to the structure that existed. Most often, the presentation followed a form that developed in writing about the sciences or for scientific communities. The change suggests an ongoing shift in attitudes about the use of the sciences in the presentation of arts, and it contributed to reassessments of the practices of those arts. The installation of order made practical books seem simpler and more useful. The basis of simplification for technical information was a rational presentation: the desirable

result of collecting and experimenting and judging was creating an order for that which had been found good.

PART I.
OF THE MATERIA PICTORIA: OR, The nature, preparation, and use of all the various substances employed in painting.

CHAP. I. Of the substances in general used in painting.

CHAP. II. Of Colours

SECT. I. Of colours in general.

SECT. II. Of the utensils, instruments, &c. subservient to the making and preparing colours.

SECT. III. Of the general operations subservient to the making or preparing colours.

SECT. IV. Of the nature and preparations of particular colours.

Robert Dossie, *The Handmaid to the Arts* (London, 1764), 1: Table of Contents (excerpt).

Dossie's publications in chemistry and other useful arts exhibit this change in presentation. In *The Handmaid to the Arts*, his book about "materia pinctoria," he used a form typical for books about materia medica. The contents are grouped according to techniques employed as well as by the media to which they might be applied. Within that framework, working from the general to the more specific, Dossie included materials and processes involving detailed recipes, with annotations and directions for appropriate use. In a format that seems almost Linnean at times, *The Handmaid to the Arts* included information about coloring materials—pigments, dyes, and enamels—as well as coloring techniques. The bringing together of all recipes for one color, or all recipes containing or used for a specific material, simplified and clarified the task of the reader. For the nonspecialist this was, as Dossie stated, improved consumerism; the order would have aided experimental work as well, but this is left unsaid.

History of Colours. Part 1. Of Black

General Observation on black colours
Native black colours
Black produced by fire
Black produced by mixture
Black paints, varnishes, &c.
Of the preparation of common writing ink
Of the dyeing of woollen black
Of the dyeing of silk black
The dyeing of hats black
The dyeing of linen and cotton black
The staining of wood, irory (sic), stones &c. black
Black glass and enamel

William Lewis, *Commercium Philosophico-Technicum* (London, 1763[-65]), v-vi.

Dossie's presentation format and its scope are similar to that of a project of his colleague William Lewis who, in the *Commercium Philosophico-Technicum*, also

emphasized the value that chemical knowledge brought to the business of practical improvement.² Published between the first and the expanded second editions of *The Handmaid to the Arts*, the scope of Lewis's work runs from general to specific, from what seems to be more simple to the most difficult. As Lewis explained, the project he initially planned would describe experiments in many different fields. The original project was never completed, and Lewis published a less comprehensive work. Nevertheless, on the advice of friends, Lewis maintained a consistent method in researching and presenting information in the *Commercium Philosophico-Technicum*.³

One part Lewis's plan was to write the history of all colors. Lewis completed only the section on black, but the independent translation of this section gave it considerable influence on scientists and practitioners concerned with color. In this portion, Lewis's stated objective was to describe the preparation, creation and use of black colors for every occupation that employs them, so that artists can learn about similarities and from differences.⁴ Lewis's discussion includes twelve sections of observations on blackness, based on his experiments with the coloring materials and techniques. He includes a summary of blackness in chemistry and physics, and examples of black-colored things, both as found in nature and as created for different branches of the color industry.

Embrasser toutes les sciences en général, c'est n'en traiter aucune à fond; & l'effet ordinaire de ces sortes de livres est de rendre les lecteurs vains & superficiels tout à la fois. Les Anglois . . . font comme nous des Cours de Sciences qui en donnent à peine les premières notions; &, par l'ancienne habitude où l'on est en France de traduire tout ce qui nous arrive de leur l'Isle, on vient encore de surcharger notre Littérature de trois volumes in 12 d'*Élemens des sciences & des arts litteraires*, traduits de l'anglois de Benjamin Martin.

"Élemens des Sciences & des Arts Litteraires, Traduits de l'Anglois de Benjamin Martin," *Le Nouvelliste œconomique et litteraire* 17 (March-April 1757), 137–8

Another general model for eighteenth-century rationalized publications that expound practical matters and are characterized by this sense of order is the *Descriptions des arts et métiers*. These single-subject works addressed their respective topic in depth, following a general presentation format that described tools, theories, materials, and procedures. Their existence sparked publications that adopted the format to present technical subjects that the *Descriptions* series did not include.⁵ Among the in-depth single-subject manuals that resemble those included in this series are publications by Charles O'Brien in London and Le Pilleur d'Apligny, Didier d'Arclais de Montamy, and Jean-Félix Watin in Paris.⁶ German-language treatises, in contrast, seem to lag in the adoption of this order. Descriptions of materials are often incomplete, sketchy in comparison to the rest of the contents, and digressive.⁷

The insertion of order in publications is a superficial manifestation of connections between the sciences and artisan practices in the eighteenth century. But it was more than a visual demonstration of some integral disciplinary connections. If this

documentation of an increasing orderliness or regularization is considered as a part of the developing standards in the presentation of information, it was a standard that would serve both authors and readers. For everyone who might purchase and use *The Handmaid to the Arts*, *The Commercium Philosophico-Technicum* or similar books, the imposition of order increased accessibility of the information contained there. For the author or compiler, adoption of this standard presentation aligned the work with rational, simple or scientific ideas—no matter the subject. This order proved to be an aid both to consumers interested in understanding objects they owned and to those engaged in investigations whose aim was to locate improvements. All investigators could know what a good investigation required. The method expressed by the order served to focus further studies of color for scientists, entrepreneurs, and amateurs.

Notes:

Note 1: *Memoirs of Agriculture, and Other Œconomical Arts*, 3 vols. (1768–82); Robert Dossie, *The Handmaid to the Arts* (London, 1758); Robert Dossie, *The Handmaid to the Arts*, 2d ed., 2 vols. (London, 1764).

Note 2: William Lewis, *Commercium Philosophico-Technicum; or, The Philosophical Commerce of Arts: Designed as an Attempt to Improve Arts, Trades, and Manufactures* (London, 1763).

Note 3: Lewis, *Commercium Philosophico-Technicum*, iv. See also William Lewis, *Proposals for Printing, by Subscription, Commercium Philosophico-Technicum: or The Philosophical Commerce of Arts Designed as an Attempt to Advance Useful Knowledge* [London, 1748].

Note 4: Lewis, *Commercium Philosophico-Technicum*, 316.

Note 5: Leslie Carlyle, *The Artist's Assistant: Oil Painting Instruction Manuals and Handbooks in Britain 1800–1900 with Reference to Selected Eighteenth-century Sources* (London, 2001); Arthur H. Cole, *The Handicrafts of France as Recorded in the "Description des Arts et Métiers, 1761–1788"* Kress Library of Business and Economics Publication 8 (Cambridge, Mass, 1952).

Note 6: Charles O'Brien, *The Callico Printers' Assistant; from the First Operation of Designing Patterns, to the Delivery of Work for Sale: Including, . . . Thoughts on Genius and Invention. . . . And a Concise History of Callico Printing to the Present Time; . . .* (London, 1789); Placide-Auguste Le Pileur d'Apligny, *Traité des couleurs matérielles et la manière de colorer, relativement aux différents arts & métiers* (Paris, 1779); Didier-François d'Arclais de Montamy, *Traité des couleurs pour la peinture en émail et sur la porcelaine et précède de l'art de peindre sur l'émail . . .* (Paris, 1765); Jean-Félix Watin, *L'Art de faire et d'employer le vernis, ou l'art du vernisseur, auquel on a joint ceux du peintre et du doreur* (Paris, 1772).

Note 7: See, for example, Sigismund Friedrich Hermbstädt, *Grundriß der Färbekunst oder Allgemeine Theoretische und Praktische Anleitung zur Rationellen Ausübung der Wollen Seiden Baumwolle und Leinenfärberey; So wie der Damit in Verbindung Stehenden Kunst. Zeuge zu Drucken und zu Blechen* (Berlin, 1807); F. G., *Versuch Eines Artistischen Handbuchs mit Rücksicht auf die Chemische Zubereitung de Farben* (Jena, 1799); Carl Friedrich August Hochheimer, *Chemische Farben-Lehre oder Ausfürllicher Unterricht von Bereitung der Farben auf allen Arten der Malerey* (Leipzig, 1792).