Examination of Gautier d'Agoty's "Histoire Naturelle"

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Anyone concerned with the history of mineralogy is certainly fascinated by Jean Fabien Gautier d'Agoty's "Histoire Naturelle". The book is interesting not only because it is the first time that minerals are depicted in color printing, but also because of the combination of these images as realistic as possible with accompanying texts by Romé de l'Isle.

Because the original work is extremely rare, the Mineralogical Record published a reprint in 1991, but it was limited to 52 copies and therefore difficult to obtain. As far as we know, only one digitized version of Gautier d'Agoty's "Histoire Naturelle", limited to the first 40 plates, is presently available on the Internet.

We were able to physically examine 5 original copies from our own collections and from the library of a collector who wishes to remain anonymous. We got photographs from a copy in the collection of Herb Obodda and the digitized copy from the École nationale supérieure des mines de Paris. Two of the 5 original copies had 40 plates, the others had 20, 60 and 70 plates respectively and together they comprise the entire work. In this way it was possible to supplement the existing information and to make all images available on our website, including a translation of the accompanying French-language texts into English.

Translation
For the translation we have chosen to match it as closely as possible with the original French text that accompanies the plates. Terms that have a completely different meaning today than in the 18th century have been retained (e.g. in plate 1 we have kept the word "molecules" even though it would now be read as "grains"). Majuscules, text in italics and the ampersand were retained in most cases.

A special mention deserves the translation of the 18th-century French word "mine", which regularly appears in the names of the specimens depicted. This was a common term for "ore" at the time; e.g. "mine de fer" translates as "iron ore", "mine d’or" as "gold ore" etc. The exact current names of the minerals and their localities are mentioned in the notes following each of the plates.

Bibliographic information
Title page:
The collation of a full copy is as follows:

The paper size measured on an uncut copy in original wrappers is 345 up to 350 x 245 up to 250 mm.

This publication was issued in "décades" (sets of 10 plates with accompanying text by Romé de l’Isle). Due to Gautier d’Agoty’s untimely death in 1781 only 3 decades (30 plates) were released by him. His widow took over the project and with the help of the engraver Swebach-Desfontaines a further 4 decades were published. We examined a copy of the first 4 decades in their original wrappers. The covers of the first 3 decades bear the name of Gautier d’Agoty, while the 4th states that the work is being continued by his widow. We have not seen any wrappers from the last 3 decades, so we don’t know if the widow d’Agoty was still involved in the production of plates 41 to 70.

All plates are mounted opposite the explanatory text. Most copies of this book contain 40 plates (or less) whereas copies with 60 plates are very rare and sets with the last ten plates are extremely rare.

Plates
The intaglio printing technique used requires considerable pressure, which leads to extreme wear of the copper plates. Certain plates therefore had to be re-engraved and of some plates different versions could be identified. Where possible, multiple states of a plate are shown.

Plates are numbered "Pl. I" to "Pl. LXX". The plate numbers are located in the top right or left corner of the plate. In some cases, the plate numbers as well as lettered parts of the image were applied in ink by hand (e.g. in plates 31, 32, 33, etc.).

Of all these plates, only the first 30 (decades 1 to 3) were produced by Gautier d’Agoty. Initially he signed "Dessiné Gravé et Imprimé en Couleur par Fab. Gautier d’Agoty. 5e. Fils" (plates 1 to 7) and the later plates were signed "Dessiné Gravé et Imprimé par Fabien G. d’Agoty. 5me Fils.". Slight variations of both signatures were found.
The next 40 (plates 31-70) are by Swebach-Desfontaines with plates 31 to 40 (decade 4) engraved by Bonvallet. Plates 31 to 40 are signed "Desfontaines del. et dir ex. Bonvallet Sculp." whereas all the later plates are signed "Desfontaines del. et sculp."

Each plate is surrounded by a double ruler or by a single thicker ruler and consists of two fields; one at the top with the mineral image(s) and one field with text below, both separated by a single ruler. The single thicker rulers were all hand applied to existing printed double rulers.

In a few cases, limited to plates 1 to 7, the background of the text field was colored light blue. It turned out that a paper with text printed on a light blue background was pasted over the original printed text field.
Register holes
Color printed plates can be recognized by the register holes in the four corners of the plate (as in figure 4 of the introduction). The plates produced by Gautier d'Agoty himself are printed in color but the images are almost all finished by hand. In some cases we will also show more than one plate to illustrate differences in the finish.

Not all of his color printed plates (in particular plates 1 to 7) show these register holes. In those cases, the paper on the backside of the print will show blue or red markings in the corners of the plate (figure 7). Probably these markings have to do with another system for fixing the position of the paper with respect to the copper plates.

Figure 7
in the corners of plate 5, blue markings on the back of the paper