**The Materiality of Text and Literary Culture in BnF Ms. Fr. 640**

The author-practitioner of Ms. Fr. 640 was a curious man, but his interest in what we might today call the materiality of text is not that easy to discern. There are references to printing, letter exchange, writing, and to the material culture of accounting, but they are peppered throughout the manuscript, sometimes within entries that are clearly dedicated to another topic entirely. As a result, the Making and Knowing Project did not track his sporadic references to the materiality of text nor include it among the thematic categories by which the digital critical edition is organized. Nevertheless, a careful search through the manuscript’s entries reveals conventional and imaginative uses of writing tools, materials, and supports; techniques and materials for printing type and image; and practical tips for the writing, reading, and clandestine exchange of letters.

If the author-practitioner’s references to the materiality of text seem dispersed and disinterested, his attraction toward the literary culture of early modern Europe is more explicit. He includes several lists of books and authors on the opening and closing pages of the manuscript, he mentions a handful of specific authors in the entries themselves, and he gestures towards the example set by the ancients and what he calls the “common commerce of letters” in his more literary entries.

Below you will find several non-exhaustive indices of entries and essays bearing on the materiality of text and literary culture of early modern Europe as seen through the lens of Ms. Fr. 640. Scholars who are interested in this topic should also consider searching the manuscript’s contents for conventional and unexpected uses of materials and tools used to make material texts, such as ink, paper, parchment, leather, wax, feathers, quills, burins, etc. Many of the research essays in *Secrets of Craft and Nature* explore not only the author-practitioner’s engagement with the craft aspects and material culture of text but also with contemporary literary and intellectual culture. The most relevant essays are listed below, but you are encouraged to explore more broadly.

**Materiality of Text**

***Relevant Entries***

Varnish of iron engravers (i.e., etchers), 4v–5r
<https://edition640.makingandknowing.org/#/folios/4v/tl>

 Recipes for varnish ground and for acid bath.

Concave mirrors, 5r–5v
<https://edition640.makingandknowing.org/#/folios/5r/tl>

 Discusses on 5v how the mirror can be used to read and write quite far from a lit candle at night.

For stampings to embellish and encrust or cover the edges of mirrors, the tops of chests, or the friezes of bed valances, 6v
<https://edition640.makingandknowing.org/#/folios/6v/tl>

 Mentions etching iron or copper using aquafortis and the use of a roller press.

Lettering of gold on paper, 8r
<https://edition640.makingandknowing.org/#/folios/8r/tl>

“Write with fig tree milk then let it dry a little, next lay the gold leaf, & once quite dry, rub with a linen cloth and only the lettering will remain.”

Merchant, 9r
<https://edition640.makingandknowing.org/#/folios/9r/tl>

 Discusses the four account books that merchants keep.

Merchant, 9v
<https://edition640.makingandknowing.org/#/folios/9v/f/9v/tl>

 Brief note of the account books that merchants keep.

Waste book, 9v
<https://edition640.makingandknowing.org/#/folios/9v/f/9v/tl>

 Waste book entries noting three transactions and their transfer to the appropriate places in the merchant’s sales book and account book.

Seat for gold leaf on parchment or paper, 10v
<https://edition640.makingandknowing.org/#/folios/10v/f/10v/tl>

“Make very clear starch glue & which does not show itself to have body. And make thereof six or five layers, & on the last, once it is half dried, apply your gold.”

For whitening enilanroc, 12v
<https://edition640.makingandknowing.org/#/folios/12v/tl>

 Discusses a method for treating carnelian stone so that it takes on a crust that can be inscribed with a diamond point to take figures, letters, etc.

Letter, more legible, 15v
<https://edition640.makingandknowing.org/#/folios/15v/tl>

“One cuts the largest pieces of beryl or crystal round on one side & flat on the other, then one sets it with a little handle and one sets down the flat side on the letter.”

Tablets, 15v
<https://edition640.makingandknowing.org/#/folios/15v/tl>

“Some are made from boxwood inlaid with ebony, sandalwood, ivory, or gold and silver like damascening. Then one writes on it with silverpoint, and next erases it with a cuttlefish bone by rubbing them.”

Mathematical figures without ruler and compass, 19v
<https://edition640.makingandknowing.org/#/folios/19v/tl>

For writing as well from the left as from the right, 19v
<https://edition640.makingandknowing.org/#/folios/19v/tl>

“Write as best you can with well-gummed ink on as many little cards as you want *[illegible]* to write words. & once each letter is well saturated with ink, put it down on your paper & rub with a tooth the back of the card.”

Layer of burnished gold on paper, 29v
<https://edition640.makingandknowing.org/#/folios/29v/f/29v/tl>

 Discusses how to make seating for gilding on paper.

For layering gold in distemper, 32r
<https://edition640.makingandknowing.org/#/folios/32r/tl>

 Discusses how to make seating for gilding, esp. gilded letters in distemper paintings.

Writing cunningly, 34r
<https://edition640.makingandknowing.org/#/folios/34r/tl>

“Cut some long strips of fine parchment & mark them according to their order with A B C & cetera, then have them sewn inside the hem of a shirt of rough cloth, like that of a messenger, who, if you want to tear up his shirt, will know nothing of it.”

Merchant, 38v
<https://edition640.makingandknowing.org/#/folios/38v/tl>

 Discusses which merchants do and do not use double-entry books.

Wax for seal and imprint, 42r
<https://edition640.makingandknowing.org/#/folios/42r/f/42r/tl>

 Discusses techniques for softening, imprinting wax and ways to embellish and mount the results.

Scribe, oil of sulfur, 46v
<https://edition640.makingandknowing.org/#/folios/46v/tl>

“If the scribe wants to clean his quill promptly of the thickness of the ink which has dried on it, one only needs to soak in oil of sulfur. And it will immediately be white & clean. *Urb.*”

Shoemaker, 46v
<https://edition640.makingandknowing.org/#/folios/46v/tl>

“If he wants to do some tanned work on black leather shoes, he can dip a writing quill in oil of sulfur and paint with it what he would like on shoes, boots, and *colets*.  And he will obtain a reddish color which will not disappear by any effort. *Urb.*”

Erasing a letter, 46v
<https://edition640.makingandknowing.org/#/folios/46v/tl>

“Dip a writing quill in fresh & good oil of sulfur & thus retrace all the letters with the dipped quill & they will disappear on parchment. *Urb.*”

Writing without ink, 46v
<https://edition640.makingandknowing.org/#/folios/46v/tl>

“Write with oil of sulfur & heat & the letter will turn as black as this one. *Urb.*”

Making a letter *à jour* on paper and other work, 46v
<https://edition640.makingandknowing.org/#/folios/46v/tl>

“If you write *~~d~~* or trace something on the paper & heat it quite soon, & immediately it will turn black; then by rubbing with a sponge, the letter will be cut because it will be burned. *Urb.* Or retrace the letter with a dry quill ~~of~~.”

On stone, black letters, 46v
<https://edition640.makingandknowing.org/#/folios/46v/tl>

“The same oil on letters engraved in stone & heated turns black & penetrates.”

Counterproofing, 51r
<https://edition640.makingandknowing.org/#/folios/51r/tl>

Cutters of printing plates, 51r–51v
<https://edition640.makingandknowing.org/#/folios/51r/tl>
Extensive entry on woodblock and copper plate printing techniques and materials.

Painter, 56v–57r
<https://edition640.makingandknowing.org/#/folios/57v/f/57v/tl>

Mention on 57r about the use of printer’s ink on velvet as a seat for gilding.

Printers’ letters, 72r
<https://edition640.makingandknowing.org/#/folios/32r/tl>

“Those who make them, mix into the lead some ~~nails~~ nailheads & old horseshoes, & antimony which makes it all melt. This composition is strong for printing, & holds up. It runs and is good for casting in lead.”

Mixture for printers, 79v
<https://edition640.makingandknowing.org/#/folios/79v/tl>

Make a layer of pulverized antimony, & a layer of latten & old scrapings or thin plates of iron or *~~clo~~* iron nail heads, and continue in this way until the crucible is full. And melt inside a *four à vent*, & then mix a little tin & fill up the crucible with lead ~~until it causes it~~. And increase the fire & mix to make the substances alloy well. The mixture for large letters is harder.

Founders of small tin works, 80v
<https://edition640.makingandknowing.org/#/folios/80v/tl>

 Marginal suggestion to try engraving (i.e., etching) with distilled vinegar.

Experimented sands, 85v
<https://edition640.makingandknowing.org/#/folios/85v/tl>

 Discussion of a particular sand, useful in mold making for its ability to capture fine detail, especially molded letters.

Founding, 98v–99r
<https://edition640.makingandknowing.org/#/folios/98v/tl>
Discussion of the first layer of mold material used in the casting of bells, used especially in areas where there is lettering or decoration.

For engraving (i.e., etching) on iron, 104r
<https://edition640.makingandknowing.org/#/folios/104r/tl>

 Gives a recipe for the acid bath for iron etching.

Letters and molded paper, 113r
<https://edition640.makingandknowing.org/#/folios/131r/tl>

“Write with well gummed ink or with any color which has body & which does not erase once moistened with eau-de-vie. Then, place your paper on a clay slab & moisten it with eau-de-vie and cast on one side & the other.”

Hard wax for imprinting seals, 133r
<https://edition640.makingandknowing.org/#/folios/133r/tl>

 “It is made from white wax, which is harder than the other, & one mixes in very finely ground ceruse or lead white until it becomes as hard as you fancy *u*, adding to it a drop of turpentine to bind it. Next, mix in whatever color you want. This is the wax goldsmiths use for modeling.”

Casting of lead and tin, 139r–139v
<https://edition640.makingandknowing.org/#/folios/139r/tl>

 Marginal notes on 139r discuss alloys and techniques appropriate for casting molded text.

Cast of wax to represent an animal that one has not got, 140r–140v
Description of wax that can be used as a ground for etching, among other uses.

Molding grasshoppers and things too thin, 142v
<https://edition640.makingandknowing.org/#/folios/142v/f/142v/tl>

“If you write on paper or on common *carton* & if your letter is of gum, the humidity of the clay slab or the wetted sand for *noyau* will moisten your letter & undo it. Therefore write with cinnabar wetted with oil on oiled paper & press in.”

Wheat oil, 151v
<https://edition640.makingandknowing.org/#/folios/151v/tl>

 Notes that “It gives gold color to silvered & burnished things, augments the color of gilded things, serves as a varnish on iron for engraving (i.e., etching) on it afterward […].”

***Relevant Research Essays***

Olivia Clemens, “Sulfuric acid for the scribe”
<https://edition640.makingandknowing.org/#/essays/ann_044_sp_16>

Sahar Bostock, “Tablets”
<https://edition640.makingandknowing.org/#/essays/ann_068_fa_18>

Nicolle Bertozzi, “Transferring Images”
<https://edition640.makingandknowing.org/#/essays/ann_067_fa_18>

Tenzin Dongchung, “What is *Carton*?”
<https://edition640.makingandknowing.org/#/essays/ann_061_fa_17>

Lila Goldenberg, “Molding Paper with Raised Letters”
<https://edition640.makingandknowing.org/#/essays/ann_005_fa_14>

Shiye Fu, Zhiqi Zhang, and Pamela H. Smith, “Molding Grasshoppers and Things Too Thin”
<https://edition640.makingandknowing.org/#/essays/ann_013_sp_15>

Nancy Olson, “Wax for seals in Ms. Fr. 640”

 <https://edition640.makingandknowing.org/#/essays/ann_077_fa_18>

Alexis Hagadorn, The Physical Construction of Ms. Fr. 640

 <https://edition640.makingandknowing.org/#/essays/ann_328_ie_19>

Marc Smith, *Forthcoming: Making Ms. Fr. 640 (on paleography and codicology)*

**Literary Culture**

***Relevant entries referencing texts***

[Lists of books,] 1r
<https://edition640.makingandknowing.org/#/folios/1r/tl>

 There are several lists of books in on this page

Books to recover, 2r
<https://edition640.makingandknowing.org/#/folios/2r/f/2r/tl>

 Unlike

[List of books,] 2v
<https://edition640.makingandknowing.org/#/folios/2v/tl>

For the workshop, 162r
<https://edition640.makingandknowing.org/#/folios/162r/tl>

For the workshop, 166r
<https://edition640.makingandknowing.org/#/folios/166r/f/166r/tl>

[List of books,] 170v
<https://edition640.makingandknowing.org/#/folios/170v/tl>

***Relevant entries referencing literary figures***

Molding a rat, 152r

<https://edition640.makingandknowing.org/#/folios/152r/f/152r/tl>

Story of Dionysius I of Syracuse (c. 432–367 BCE), citing Cicero (unacknowledged)

Against plague, 170v

<https://edition640.makingandknowing.org/#/folios/170v/f/170v/tl>

Reference to Otto of Freising (c. 1114–1158), German crusader and Bishop of Freising

For preserving, 170v

<https://edition640.makingandknowing.org/#/folios/170v/f/170v/tl>

Reference to Conrad of Licthenau (died 1240), German nobleman and chronicler, and Girolamo Mercuriale (1530–1606), Italian philologist and physician

Fashion of preparing spat, 119v

 <https://edition640.makingandknowing.org/#/folios/119v/f/119v/tl>

Reference to Conrad Gessner (1516–1565), Swiss naturalist, botanist, and physician

For preventing someone from eating a foodstuff, 35v

 <https://edition640.makingandknowing.org/#/folios/35v/f/35v/tl>

Reference to Mattioli (1501–c. 1577), Sienese physician and naturalist

Concave mirrors, 5r

<https://edition640.makingandknowing.org/#/folios/5r/f/5r/tl>

Reference to Ptolemy and Archimedes

Silkworms, 53v

<https://edition640.makingandknowing.org/#/folios/53v/f/53v/tl>

Reference to Marco Girolamo Vida (c. 1485–1566): Italian humanist and Bishop of Alba