

# Historic Letterlocking: *The Art and Security of Letter Writing*

by Jana Dambrogio



## What is letterlocking?

Letterlocking refers to the process by which a substrate such as paper, parchment, or papyrus has been folded and secured shut to function as its own envelope. It is part of a 10,000 year-old information security tradition, variations of which have been used in cultures throughout the world on formats ranging from Mesopotamian clay bullae to Bitcoin. Locked paper documents, the focus of this article, have been used since the late Middle Ages by regents, their secretaries, spymasters, soldiers, and the general public. Often times the same person used more than one letterlocking format; some variations were more secure than others. In order to be considered to have the highest level of built-in security, a locked paper document must meet the following criteria: it must have a paper lock cut from the letter itself, as well as a secondary locking system of an adhesive substance such as wax, and one must be required to tear or cut the paper lock to gain access to the information inside.<sup>1</sup>

Examples of historic locked letters illustrate wide-ranging degrees of security. Documenting the physical evidence of well-preserved “opened” original manuscripts has helped to define their different “closed” locking formats and to identify their multiple levels of built-in security and various authentication devices. This information may assist scholars in their interpretation of the artifact, its words and function. The three-dimensionality of the letter folds adds an additional consideration for the repair and conservation of original unlocked documents as artifacts.

## Removable locks on letters used by French sovereigns in the eighteenth century

One variation on letterlocking is the “removable lock with long slit parallel to the fore edge.” The earliest documented use of this technique dates back to 1704 and is found on a letter signed by King Louis XIV of France (the “Sun King”) to Ippolita Ludovisi, Princess of Piombino, in the Boncompagni Ludovisi Family Archive (BLA), Rome, Italy.<sup>2</sup> The BLA also holds a further 25 letters sealed with removable locks and signed from Queen Marie Antoinette and King Louis XVI of France to Cardinal Ignazio Boncompagni Ludovisi between the years 1775 and 1787.

## Prepping the paper for writing

The process for employing this technique most likely went approximately as follows. Each sheet of paper was prepped for writing; some have folds and faint horizontal scribe lines to place the text. After the letter had been written and dated by a scribe, the sovereign may have signed it (or had someone authorized to sign for them). The letters also bear the signature of another individual, possibly a secretary. The letters were folded, leaving two outermost panels, one of which bears the recipient’s name and title.

## Preparing the paper lock

A long, dagger-shaped paper lock was prepared separately, possibly in advance of securing the letter shut. The lock was cut from a different paper source (possibly paper remnants). A red adhesive, either warm sealing wax or a dampened circular starch wafer (ca. 25 mm in diameter), was applied to the

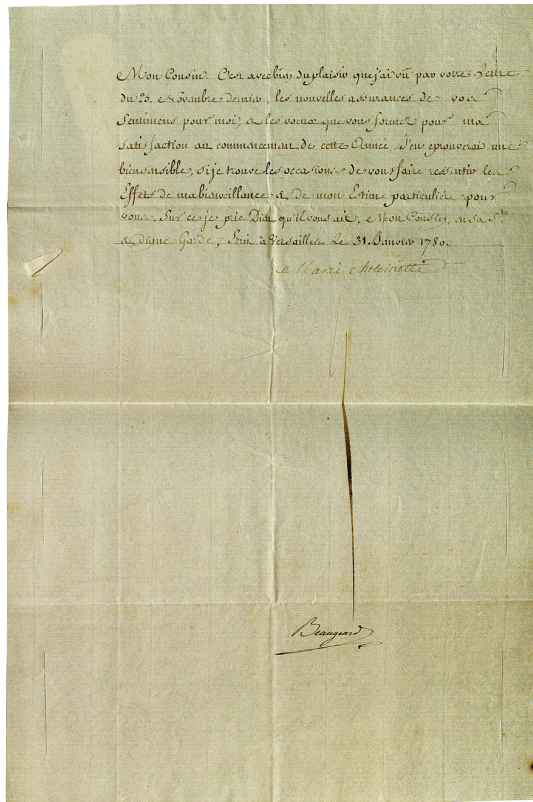
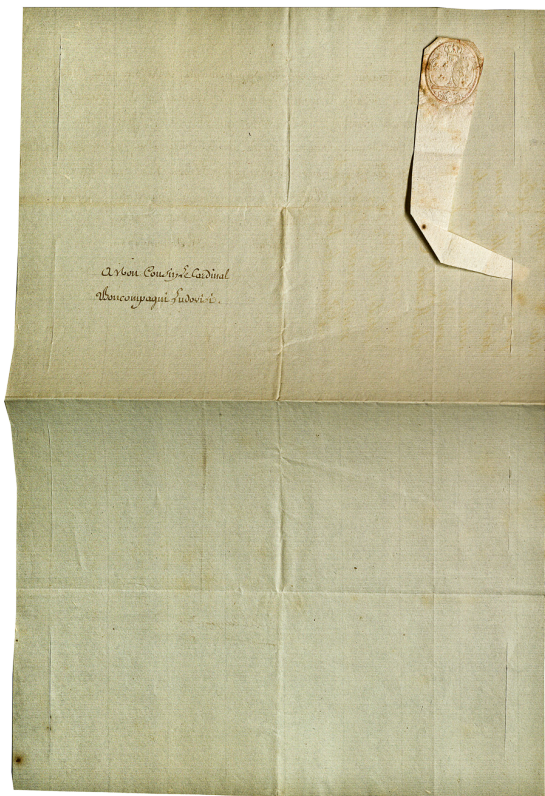


PHOTO | T. COREY BRENNAN

Queen Marie Antoinette of France's letter to Cardinal Ignazio Boncompagni Ludovisi. 1780. The only letter in the Boncompagni Ludovisi archive (BLA) with a removable lock intact. Observations made from well-preserved original manuscripts can support hypotheses about the ways in which the letters were once secured shut. The BLA is an invaluable resource for this type of artifact study. The letters are not pristine but rather remain in their original formats and have never been repaired, leaving the abundant original physical nuances visible to be observed and documented.

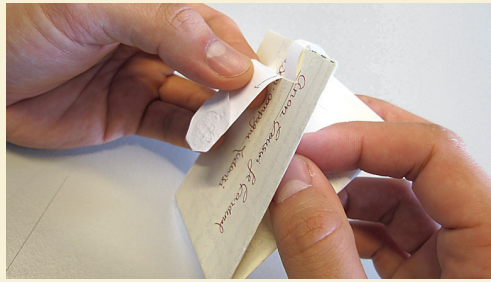
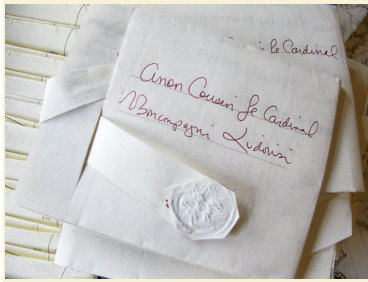
wider end of the lock approximately 50 mm from the top edge. The top edge was then folded down over the red adhesive, sandwiching the adhesive between the two layers of paper. The sovereign's signet was impressed into the wax or wafer through the paper, creating a papered seal. On the verso of some of the locks, there is a distinct impression of a textile, which may suggest the surface on which the paper locks were prepared. The corners of the now folded top edge were cut off, leaving a rounded edge. The remaining paper folded over now below the signet was cut into a "V" shape.

### Locking the letter shut

The letter was folded lengthwise twice, aligning the short edge to short edge (top to bottom). This action was repeated, leaving a long tube-shaped paper. A final fold left the fore edges aligned and created the two outermost panels for locking

the letter shut. A long (ca. 75 mm) slit was made through all the panels of the folded letter, parallel to and approximately 25 mm from the fore edge. The tapered end of the paper lock began the locking action by first weaving through this long slit, then wrapping from the back panel around the fore edge of the letter to the front address panel where it was re-inserted into the slit between the separation of the two halves of the folded letter. The tip travelled and appeared at the top edge of the folded letter. The tapered tip of the lock was folded down to tuck back into the letter, out of sight. The letter was ready to send.

In this format, the paper lock is not cut from the same piece of paper the sender used to write the letter, a requisite for the most secure letterlocking formats. The letter would look secure at first glance, but the removable lock would in fact make it easy to unlock and read.



Left: teaching model “locked.” Centre and right: a workshop participant locking the letter shut.

Making models of historic originals is a necessary part of the process of learning how these letters once functioned as three-dimensional objects. Unlike the originals, models can be manipulated; through folding them up to mimic how the original may have once functioned, observers may catch details that could otherwise be overlooked.

Two types of models used in the study of historic letterlocking are “locked giveaways” and “simulacra.” A simulacrum is a model fabricated in the presence of an original letter which duplicates many of the qualities of the specific original. Simulacra help to document the physical manipulation of the paper (for example, helping to differentiate deliberate

cuts and folds used for writing, locking and sending from ones used for filing, storing, or repair), to define locking formats, and to recreate proposed original function through a surrogate. A “locked giveaway” is a teaching model used as an educational and outreach “experience” tool of engagement.

See a YouTube letterlocking video at: <http://youtu.be/5LVFXLJX2WU>.

Of the 25 letters from Queen Marie Antoinette and King Louis XVI to Cardinal Boncompagni Ludovisi, only one letter signed by the Queen retains its paper lock in its entirety. Without this invaluable piece of physical evidence, one could mistakenly assume, based on the fragments of the other 15 extant paper locks, that the paper lock was secured shut with the wax or wafer, and anchored to the letter over the slit as other paper locks function in an earlier time.

In viewing thousands of letters over the last 14 years, the author has examined only one other letter, sent from the Bey of Tunis<sup>3</sup> to the President of the

United States, which employs a removable lock.<sup>4</sup> Was the removable lock format popular for use in sending certain types of ceremonial letters exchanged between heads of state, or a tradition with origins in French correspondence?

Creating models enables custodians to make information on the minute physical details of historic letters available for study and interpretation, while preserving the integrity of the originals. The letter is the artifact, the witness to a specific historic moment. Alter its physical evidence and the witness loses its voice.

1 To learn more about the criteria needed for a letter to have the highest level of built-in security, view the 2014 MIT preservation week talk at <http://techtv.mit.edu/videos/28737-2014-libraries-preservation-talks-jana-dambrogio>.  
 2 Many thanks to Princess Rita and Prince Nicolò Boncompagni Ludovisi for the invitation to conserve their family’s archival treasures and to Dr. T. Corey Brennan for his collaboration and encouragement. The letters presented in this paper are some of the treasures that were newly discovered in a tin box in 2010. Visit: [www.villaludovisi.org](http://www.villaludovisi.org).  
 3 National Archives and Records Administration, RG 59 Ceremonial Letters: Documents from Heads of Foreign States 1789-1909. ARC Identifier: 302026. Letter from Bey of Tunis, Mahmud ibn Muhammad, 24 September 1817 to President James Madison announcing that Thomas D. Anderson had formally presented his credentials to the Bey.  
 4 Thanks to conservator Jake Benson for translating the letter and artist Sarah Chui for explaining the significance of the kite-shaped paper lock used to secure the Tunisian letter shut.  
 5 Thanks to Patsy Baudoin, librarian, Massachusetts Institute of Technology and colleagues in the Canadian Bookbinders and Book Artists Guild for sharing their knowledge about French letter-closing traditions. It was considered impolite to seal a personal letter shut. In Canada, it was actually cheaper to mail an unsealed envelope letter up to the last quarter of the twentieth century (oral communication with Rose Newlove).