

Nicolas De Fer's *L'Amerique* Wall Map: A Look into Ethical Concerns Resulting from Past Restoration

INTRODUCTION AND BACKGROUND

This is a before treatment photo of the 1739 edition of a wall map of the Americas, by Nicolas De Fer (fig. 1). The map is from the collection of Library and Archives Canada and is entitled '*L'Amerique Divisee selon l'etendu de ses Principales Parties*', or, '*America Divided according to the extent of its Principal Parts*'. *L'Amerique* is part of a series of large wall maps by De Fer which also include the world, Europe, Asia and Africa. J.F. Bénard, one of De Fer's three sons-in-law, is listed as the printer on the 1739 edition of the *L'Amerique* map, though Nicolas De Fer is listed as the printer of the 1698 edition of the map which is also part of LAC's collection.

De Fer's *L'Amerique* map contains specific significance to Canada, due to its large, decorative vignettes depicting late 17th century Canadian life, such as a Newfoundland cod fishery, and the famous vignette of beavers building a dam near Niagara Falls (figs. 2–3). As the beaver vignette was later reproduced in a map by Hermann Moll, Nicolas De Fer's *L'Amerique* map is referred to as the "Original Beaver Map". (Dahl, p.23) Though the engraving of the map is attributed to Hendrick Van Loon, the numerous decorative vignettes are believed to have been designed, etched and engraved by Nicolas Guerard. (Dahl, p.25)

Few of De Fer's large wall maps have survived over time, and even fewer with the original cloth backing, dowels or accompanying text panels. The *L'Amerique* maps in LAC's collection each consist of a title banner, two side text panels, a bottom text panel and the four central panels of the map. Each text panel is made up of two sheets of paper, totalling twelve sheets in all. Neither of LAC's *L'Amerique* maps includes the original dowels once used for display. Unfortunately, tack holes and black paint along the outer edges of the 1739 edition, are the only remaining evidence that dowels had been attached.



Fig. 1. LAC's 1739 Edition of *L'Amerique* (R1-2000/1739) under raking light, before treatment

Before conservation treatment of the 1739 edition could be considered, it was necessary to locate another *L'Amerique* map, complete with all the text panels, which could be referred to during treatment. LAC's 1698 edition of the map was treated several years ago, using enzymes to remove a paper border which covered severely trimmed and incomplete text panels. (Bedynski) It was therefore necessary to look beyond Library and Archives Canada for a complete version of the map. A *L'Amerique* map with full text panels was located at the William L. Clements Library, at the University of Michigan, in Ann Arbor. A scanned image at a scale of 1:1, was purchased from the library for use in the treatment of LAC's 1739 edition.

To better understand some of the ethical issues presented by the untreated 1739 edition of the *L'Amerique* map, it's necessary to examine the map's condition, past restoration, the fabrication of the title banner and the resulting treatment decisions.

CONDITION OF THE MAP

The backing paper of the untreated 1739 edition was not original. It was a single sheet of acidic, machine-made paper, which needed to be removed for the long-term preservation

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LEFT TO RIGHT

Fig. 2. The decorative vignette of a 17th century Newfoundland cod fishery

Fig. 3. The decorative vignette of Canadian beavers building a dam near Niagara Falls (Note the perfect ramps leading to the dam and the beavers walking upright while carrying mud on their tails)

of the map. In addition to the acidic backing, there was overall cockling and an opaque substance had been generously applied to the tears and losses in the map and text panels (fig. 4). The opaque had also been used to cover complete rows of text, which had been misaligned during past restoration. As a result, the substance would need to be removed to view the original text beneath.

Text Panels

Tenting was occurring between the left text panel and the central panels of the map. Examination of the area through transmitted light revealed evidence of a once overlapping margin, extending from the map panels onto the verso of the text panel (fig. 5). During past restoration, the left text panel was likely separated from the map by cutting between the panels, severing the overlapping margin in the process. As the margin was not replaced, tenting along this area was inevitable. In order to bring the area back into plane, the missing overlapping margin would have to be recreated.

While examining the bottom text panel, conservators noticed that the title section of the panel was placed at the right and that the section on the left began in mid sentence. The two sections of the panel had been reversed during past restoration and would need to be returned to their original positions (fig. 6).

Language had clearly presented difficulties during restoration, as the text on all but one of the in-fills was Italian, though the language of the map and accompanying text panels is French (fig. 7). Though the Italian text had nothing to do with the map, the infills were considered part of the history of the object and some questioned their removal. The infills had been badly shaped, were covering original text and would therefore need to be completely removed to view the

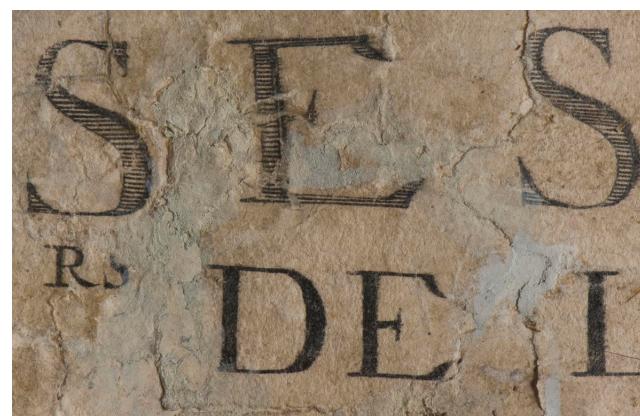


Fig. 4. An opaque substance had been applied to damaged areas of the text and paper

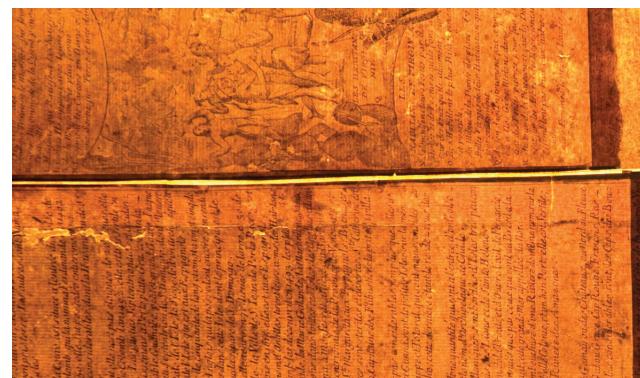


Fig. 5. Transmitted light shows evidence of a missing, overlapping margin, resulting in tenting between the panels

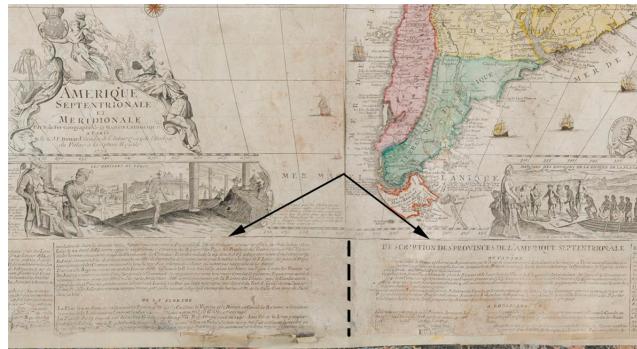


Fig. 6. The two sections of bottom text panel had been reversed during past restoration

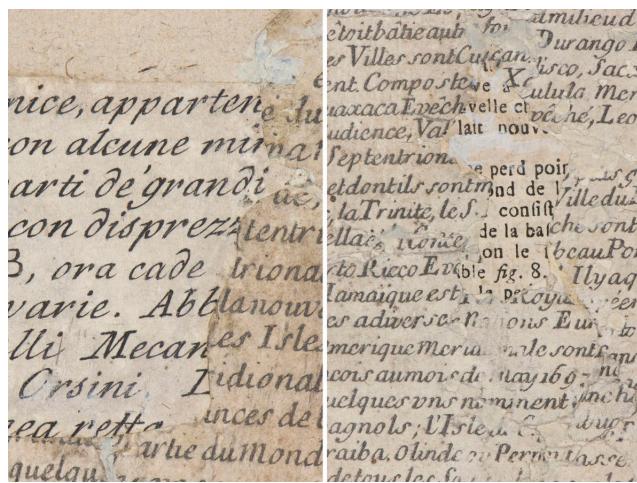


Fig. 7. Text infills were from a variety of sources and all but one was in Italian

text beneath. In addition, text fragments seem to have been placed haphazardly throughout the map and text panels, as the fragments had nothing to do with the surrounding text. Determining the correct location of these fragments would require referral to the scanned edition of the *L'Amerique* map from the William L. Clements Library.

Non-Original Components

A decorative, marbled paper border framed the outer edges of the text panels. The border was a machine-made paper, clearly a much later addition to the map. No text or original information was covered by the marbled paper. Conservators met with the archivist and agreed that the marbled paper would be documented and removed to permit re-alignment and repair of the map and the text panels. Further decisions about returning the border to the map would be made at a later point in the treatment.

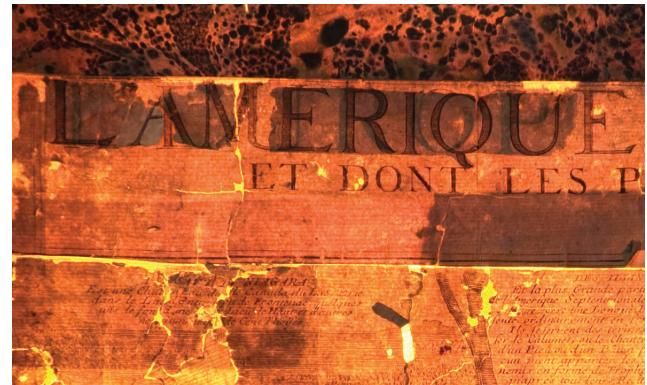


Fig. 8. Transmitted light revealed the word Europe beneath L'Amerique



Fig. 9. The U in the word Europe below has become part of the letter M in the word L'Amerique

Title Banner

Delamination was occurring along multiple tears in the title banner, revealing another layer of printed text beneath. When viewed with transmitted light, it was clear that the word *Amerique* had been cut from another source and pasted over-top of the word *Europe* (fig. 8). Due to a loss in the paper, half of the letter 'M' in the word *L'Amerique* was missing, revealing part of the letter 'U' in the word *Europe* beneath. A line was drawn between the M and the U with handwriting ink, completing the letters and therefore disguising the loss (fig. 9). The text style, ink and paper used in the word *L'Amerique*, appears to be identical to the rest of the title banner and was therefore considered authentic to the time period. Further investigation into the purpose of the layered title was therefore necessary before making treatment decisions.

Conservators consulted LAC's 1698 edition of de Fer's *L'Amerique* Map and found similar cut edges around the word *Amerique* in that title banner. When viewed with transmitted light, the word *Europe* was visible beneath *L'Amerique*, just as it had been in the 1739 edition. To determine if only these two

editions had been altered, digital images of *L'Amerique* maps from other institutions were also examined. Conservators noted cut edges within the title areas of the digital images as well. The similarities among the various title banners could lead one to draw conclusions about their production, though further investigation would be required for certainty. As much of the text is the same in other title banners from the series, the printer likely took an already existing title banner from an earlier De Fer wall map, that of the *Europe* map in this case, and covered the word *Europe* with *Amerique*. This eliminated the need to engrave and print an entirely new title banner for the *L'Amerique* map, when only the location name needed changing.

CONSERVATION TREATMENT

Conservation treatment began with the humidification of the overlapping seam along the right side of the map (fig. 10). The overlap was gradually lifted with a spatula, allowing the text panel to be safely cut from the map without damaging the overlapping margin, as had occurred to the left text panel during past restoration. The right text panel was then separated into two sections. The remaining text panels were also removed and separated in the same manner. All the text panels were then pre-treated with alcohol, and immersed in water baths to aid in the backing removal. Light brushing during bathing aided in the reduction of the opaque



Fig. 10. Using steam on the overlap to allow safe separation of the text panels from the map



Fig. 11. Washing a central panel of the map on the suction table, through a layer of facing tissue

substance. Pieces of the backing paper were kept, as the woven imprint in the adhesive was the only proof there had once been a cloth backing. Due to the extensive damage and the hand colouring, the backing on the central map panels was removed with the aid of a Laponite poultice for greater control of the humidification.

The central panels were then safely washed on the suction table. Warm water was gently sprayed and dabbed through a layer of facing tissue to protect the watercolours (fig. 11). Once all the panels were washed, they were sized with a warm 1% solution of gelatine in water, applied by brushing through a layer of facing tissue.

Infilling

One method considered for infilling losses in the text panels, was to use the scanned copy to print the missing text and insert it into the loss areas. The intent was not to disguise the losses in the original, but rather to provide the missing textual information where possible. This proposed method of infilling raised many ethical concerns. In addition, it was extremely difficult to find an appropriate printing method for the infills. Following further consultation, the decision was made *not* to incorporate the missing text as infills but to find another means of including the missing information.

The two sections of the right text panel were the least damaged of all the panels, allowing them to be leaf cast. All of the remaining panels were more heavily damaged, so the same leafcasting pulp was applied by hand (fig. 12). The wet pulp infills were blotted, partially dried and lined with a thin Japanese tissue, using wheat starch paste as an adhesive. Any overlapping margins which had been trimmed from the panels during past restoration, were re-created with the infill pulp and lining tissue.

Reassembly and Lining of the Map

Following infilling and drying, the center panels of the map were then re-assembled in order according to their



Fig. 12. Applying pulp infills by hand to the more damaged areas.

overlapping margins. A complex, double-lining method was selected because of the overall size of the map, the multiple components requiring assembly and the necessity to control the dimensional changes during this part of the treatment.

An oversized sheet of Terylene (also known as Dacron or sailcloth) was sprayed with water, and then pasted out with wheat starch paste. The Terylene was then transferred to the vertical light wall, used for work on oversized documents (fig. 13). Sheets of Kizukishi paper were pasted out with wheat starch paste and added to the Terylene, rolling them with a brayer to remove any air bubbles. The sheets of Kizukishi were allowed to dry on the Terylene.

The assembled and dried center panels of the map, were first humidified with a damp brush, then pasted out with wheat starch paste. Paste was also applied to the Kizukishi sheets already on the wall. The center panels of the map were then transferred to the light wall and rolled out with a brayer. The title and side text panels were added in the same manner, followed by the bottom text panel (fig. 14). Alignment of the panels was a result of extensive measurement and photo documentation. Following discussions with the archivist, it was decided to return the marbled paper border to the map. Though the border was not originally



Fig. 13. A pasted-out sheet of Terylene being smoothed onto the glass surface of the light wall



Fig. 14. Assembling the map and text panels onto the first lining

part of the map, it was not obscuring any of the textual information and could easily be removed if necessary. Once the map and text panels had been assembled on the light wall, the marbled paper border was added.

When dry, the Terylene sheet was peeled from the light wall and placed face down on the table (fig. 15). The Terylene was then separated from the verso, by carefully sliding hands between the Terylene and the thin Kizukishi paper of the first lining. To allow the map to return to its original dimensions, it was rehumidified prior to the second lining. With the map still face down on the table, sheets of Kurotani #52 were adhered to the verso of the first lining with wheat starch paste (fig. 16). Large margins of the Kurotani paper were pasted to the table, providing tension to the map while drying.

Inclusion of the Missing Text

Instead of storing the Italian infills in some sort of an envelope or sleeve, it was decided to give them a more active role. The infills were positioned on a sheet of Mylar, according to



Fig. 15. Removal of the map, first lining and the Terylene from the light wall



Fig. 16. Applying the sheets of the second lining to the verso of the map

their original locations, adhering them in place with Lascaux 360HV. This Mylar ‘overlay’ can be placed onto the repaired text panel, to view the Italian infills in their previous locations (fig. 17). As the decision had been made not to print infills for the areas of text loss, the full text panels were printed from the scanned copy and included with the completed map in storage. This was a much more sympathetic manner of including the missing textual information.

CONCLUSION

The *L'Amerique* map has presented conservators with numerous challenges and ethical considerations. The delaminating title has given us further insight into De Fer's production methods. The opportunity to consult another *L'Amerique* map during treatment has allowed conservators to correct damage from past restoration, which would not have been possible otherwise. Text and original elements of the map which were hidden, have now been uncovered. Though the textual information missing from the loss areas was not re-introduced into

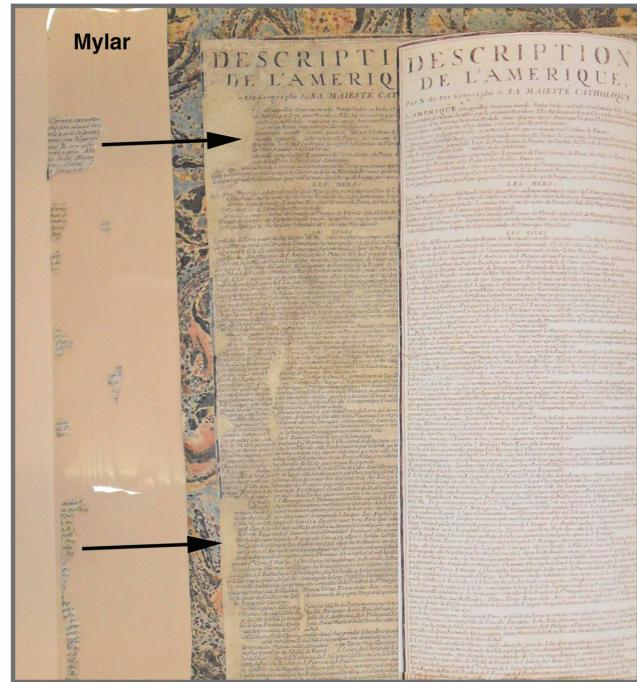


Fig. 17. Mylar overlay with the old infills (left), the completed text panel (center), a printed copy of the scanned *L'Amerique* map from the Clements Library in Michigan (right)



Fig. 18. After Treatment photo of the 1739 edition of LAC's *L'Amerique* map (R/1-2000/1739)

the map, the missing information has been printed from the scanned copy. The printed panels are now stored with the map as reference panels, making this *L'Amerique* map a much more complete source of information (fig. 18).

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REFERENCES

- Bedynski, Maria, *The Use of Enzymes in the Conservation Treatment of a Seventeenth-century Wall Map of America*, J.IIC-CG, vol. 20, 1995, pp.11–18
- Burden, Philip D., *The Mapping of North America II, A List of Printed Maps, 1671–1700*, Rickmansworth, UK, (Raleigh Publications, 2007), pp. 455–457
- Buisseret, David, *The Boeing Maps at the Newberry Library*, Mapline, A Newsletter published by The Hermon Dunlap Smith Center for the History of Cartography at The Newberry Library, Number 110-111/Summer 2010, pp. 1–4
- CAC/CAPC, *Code of Ethics and Guidance for Practice, Third Edition*—Joint publication between the Canadian Association for the Conservation of Cultural Property and the Canadian Association of Professional Conservators, 2000)
- Dahl, Edward H., *The Original Beaver Map: De Fer's 1698 Wall Map of America*, The Map Collector, vol. 29, December 1984, pp. 22–26
- Tooley, Ronald Vere, *The Mapping of America*, (London, Holland Press, 1980), p.128
- Treasures of the National Archives of Canada* (Toronto: Joint publication: University of Toronto Press/National Archives of Canada, 1992), pp. 26–27
- Suarez, Thomas, #48 *America [Wall Map]*, in: *Shedding the Veil: Mapping the European Discovery of America and the World*, based on selected works from The Sidney R. Knafel Collection of Early Maps, Atlases, and Globes 1434–1865 (Singapore: World Scientific, 1992), pp. 140–144

MATERIALS

- *Laponite RD*: (sodium magnesium lithium silicate) A highly purified, synthetic, patented colloidal clay in the form of a white powder, which forms a clear gel when mixed with water. It has a pH of 9.8 at a 2% suspension. The gel has also been prepared using solvents, though the manufacturer has indicated that solvents cannot completely replace the water. To avoid leaving residue directly on the paper, Laponite can be applied to a barrier layer such as Reemay or a facing tissue. Used as a poultice in paper conservation for local humidification and softening of adhesives or in-ground dirt. Available from various conservation material distributors.

- *Terylene*™ (also known in the U.S. as Dacron or sailcloth) A crease resistant, synthetic, polyester fabric used to make ropes, rain wear and sails. (polyethylene terephthalate, PET) Used in paper conservation as a temporary support during lining. Also used as a support in paintings conservation.
- *Lascaux 360HV*: A thermoplastic copolymer butyl-methacrylate dispersion thickened with acrylic butyl-ester. Extremely elastic; the dry film remains permanently tacky. Water thinable, insoluble in water when dry. The adhesive has a pH of 8.9 and is bio stabilized.

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