Chapter 19
Quality Control and a Method for the Drying of Flooded Archive Collections: The Case of the Municipal Archive of Barcelona (2013)

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ABSTRACT
This chapter is based on the very real experience of a flood in one of the repositories of Barcelona’s Municipal Archive, introducing a quality control methodology for the air-drying of wet documents. It is a simple monitoring system that allows you to quantify the degree of drying during treatment. The data derived from it will help reduce intervention to a minimum, optimizing resources, reducing losses and minimizing the risk of mould formation. Disaster Plans include many possible scenarios. Because of their vast scope they cannot contain detailed practical information that would be helpful for those who have to intervene. All the steps of the process are reported here, from the choice of the most suitable methodology (forced airing through plastic mesh ventilation) to the completed stabilization of the holdings. The goal is to inform the reader of the measures adopted at each stage, providing practical advice.

INTRODUCTION
When an archive is flooded, the key is to act quickly in order to avoid further damage. The worst part is not the cockling or the migration of inks, but what is yet to come: the formation of mould, the blocking (adhesion) of supports to one another (sometimes irreversible)... in other words, the loss of information.

In this period of panic, keeping a cool head and making the right decisions would be easier if there were a clear procedure to follow. Sometimes an outline of the steps to be followed, a list of the available resources, and several contact numbers are enough: this is the basis of a Practical Disaster Plan.

The flood that took place in the Municipal Archive of the District of Gràcia was not of...
biblical proportions - only affecting a part of the repository - but it was large enough to overwhelm the staff who worked there.

After taking the first emergency steps, the Archive entrusted the management and supervision of the recovery process to an external agent, Rita Udina. As a restorer she had experience in large-scale archival interventions, in the removal of mould growth from collections, and in the treatment of flooded material, so she was fully aware that her reaction speed was critical.

Now that the job is over and the outcome was positive, it can be admitted that the restorer experienced a moment of panic, but this did not prevent her from reviewing the literature and contacting reputed colleagues and professionals in the field, all of which allowed her to act with the certainty of professional collaboration.

From this process two key lessons of particular value to the restorer were learned. Firstly, an increased understanding of the differences in the drying process that can be used when dealing with different types of document (photographs, loose leaf items, books and coated papers all react differently and therefore impose their own different demands). This paper includes a detailed review of the pros and cons of the treatments used in this disaster response. Particular attention will be paid to the process of air drying, but the use of blotting paper and other methodologies are also discussed, including an account of the resources and materials demanded by each process. It is hoped that this account will be of help in similar situations.

Secondly, the creation of a methodology for measuring the degree of drying during treatment is discussed. It is necessary to objectively measure the drying process to guarantee the best possible outcome and save resources (which can be scarce at the best of times). Likewise it is important to remain wary of overzealous intervention because it results in greater delays and a more limited scope while increasing costs. But neither should intervention be so fast that it poses a medium-term risk of fungal growth in material that has not been fully dried. This issue is explained towards the end of this chapter, which follows the chronological order of events, but represents the most innovative contribution to the management of water damages to archival and library materials.

The treatment of archival material has some major differences that distinguish it from that of books in the event of disaster management, even though they ostensibly share the same primary support (paper). The principal advantage in an archive is that its contents can be more swiftly separated ('pulling' a book is a slow, complex matter in comparison), but there is the distinct disadvantage of maintaining order: both the order of a collection and of each item within that collection are important. This aspect is explained later in the chapter and is probably the second most important concern (the first being to dry out the collection before the formation of mould and the irreversible blocking together of wet leaves as they dry).

This chapter contains, in essence, all the practical information that anyone needing to deal with flooded archives would like to have at hand, bypassing the need to conduct research or experiments. The author shares all the obstacles that were met along the way (big and small) and provides practical advice in the hope that it is of true use in the future.

The fact that no archive publicises incidents of this nature, and the lack of resources for dealing with the aftermath of such disasters, is probably the cause for such scant literature regarding flood recovery. Despite the most efficient interventions, the final result will never be better than what existed before the flood. However, the way forward is not to muddle through as best as possible and keep silent about such disasters, but rather to share the experience. Hopefully this will serve to improve future treatments to not only better the future of our documentary heritage, but also alleviate the stress experienced by those who battle against time and fight to save what they can in the wake of a flood. For readers who find themselves in this