

Environmental history of a river. The case of the Ripoll River and the city of Sabadell in the 20th century.

Abstract

The city of Sabadell was one of the leading industrial centers in Catalonia at the nineteenth century. Initially, much of the textile industry was located near the Ripoll River. This river has been a key element in the industrial revolution of the *Vallès Occidental*, but this status has brought him to suffer a series of transformations and environmental impacts. The aim of the project proposed here is to study the historical evolution of the last 100 years of the Ripoll River taken into account all the potential actors who could have played an important role. The methodology to develop this goal is divided according to the dimensions raised (social, economic and environmental) and will be based on collected data from primary and secondary sources. It is expected that with the completion of this project we can develop a memory that can serve as reference for future studies and, occasionally, present the results in a temporary exhibition in the history museum of Sabadell.

Key words: Ripoll River, Sabadell, and Textile.

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1. Introduction

1.1. Sabadell

Sabadell is one of the two capitals of the *Vallès Occidental* region and it is the fifth most populated city in Catalonia with 206,493 inhabitants (2009). The city pioneered the industrial revolution in Catalonia, especially in textiles, receiving the nickname of the Catalan Manchester. The *vapors* (old textile factories operated with steam) from that era are still present in the city but now have social functions, like libraries, schools or community centers. The industrial character of that era is still evident today but the economic activity of the city has been diversifying towards the services sector.

1.1.1. A brief history of the city

The nineteenth century was the great era for the textile industry of the town. In 1838 the first steam engine was installed and from that moment the town was filled with *vapors*, becoming the main woolen center of Spain. During this century the population grew (by a factor of eleven) due to immigration from *Alicante*, *Murcia* and *Valencia* and water

supply, sewerage and public lighting (but only in the main districts) were carried out. In 1877 the town received the title of city.

In the twentieth century, textiles were the main industry of the city followed by metallurgical, but in the 1950s the city began to diversify its economy. The migratory waves of the 1950s, 1960s and early 1970s multiplied the population by ten and new districts were created to accommodate the new residents.

1.2. The Ripoll River

The Ripoll River born in *La Serra de Granera* (in the town of *Sant Llorenç Savall*) at 640 meters. He southward between the hills of *Farell* and *Sant Llorenç del Munt*, passes through the towns of *Sant Feliu del Racó*, *Castellar del Valles*, *Sabadell*, *Barberà del Vallès*, *Ripollet* and *Montcada i Reixac*, where it binds to Besos River. The length of the main course of the river is 39.2 km and all the tributaries totaling a distance of 181.5 km.

1.2.1. A brief history of the river

The flour mills and irrigation channels are the first structures that appear at the river's environment. The mills were converted to the manufacture of paper during the eighteenth century, which was the dominant industry in the river basin until the twentieth century with the emergence of the textile industry in the *Vallès Occidental* region. The environmental impact of textile companies was very strong, the use of harmful substances, an uncontrolled expansion of industries and a greater use of the aquifer, caused by the increase of the inhabitants of nearby villages, caused a serious pollution of the river.

On 25 September 1962 the Ripoll river flow grew to six feet, destroying everything in its path. The rain of that night was short and very intense and ended with the destruction of neighborhoods and a thousand deaths in the region of *Vallès Occidental*.

1.3. Description of the project

The project proposed here aims to study the Ripoll River, it passes through the city of Sabadell, dividing the study into three dimensions (social, economic and environmental), to integrate them and then get an overview of past 100 years of history of this river. To properly analyze each dimension, the work will be divided into three sections, each with its own methodology:

Social dimension: It aims to analyze the relationship between the river and the people who live near. To carry out this analysis shall be performed personal interviews with people over 60 years from the neighborhood closest to river. Otherwise, it will proceed to gather information about the river's influence on the people of the municipality, and vice versa, through the newspapers, the novels and short stories written by local authors, guides and the demographic data of the last 100 years.

Economic dimension: the recent history of the Ripoll river is closely tied to the strong industrial development of the town, especially the textile industry. The economic analysis can be a complex task due to the lack of information and the small amount of existing data. It is for this reason that we develop this dimension based on direct and indirect data. The direct data will be based on the commercial register of the town and the statistics of the IDESCAT and the INE. Meanwhile, indirect data will be obtained from the interpretation of land use maps and topographical maps which have become over time.

Environmental dimension: in this project, that dimension, will serve to bind the other two dimensions. It aims, on one hand, to assess the possible impacts of the human activities on the river. On the other hand, wants to study how the river changed the behavior of people and industries of the town, either due to flooding or drought periods. These evaluations will be based on data from the ACA, the municipal newspapers and magazines and aerial photographs.

2. Objective of the project

The main objective of this project proposal is to reconstruct the historical evolution of the last 100 years the Ripoll River. To develop this goal the following partial objectives has been raised:

- Analyze the river influence on people, and vice versa.
- Assess the economic development that the city has suffered due to the presence of the river
- Assess the potential environmental impacts that the river have suffered

3. Methodologies

As explained in section 1.3. this project will be divided into three dimensions. Let us now describe, in more detail, the methodology that we will follow to analyze each dimension.

3.1. Social Dimension

To analyze this dimension will be used primary and secondary sources (see section 5). In schematic form, what we will do is:

- Personal interviews with the residents of *El Poble Nou* neighborhood over 60 years (languages: Catalan and Spanish).
- Check the bibliographic sources of the *Arxiu Històric de Sabadell* (novels, stories and guides that take place near the River Ripoll).
- Check newspapers and other information publications at the Communication Library archive of the Autonomus University of Barcelona (UAB).
- Query data from INE and IDESCAT to establish the demographic evolution of the city.

As can be seen, the data obtained in the analysis of this dimension are very heterogeneous and we will need to be careful. The data obtained from primary sources will mark the development of this dimension and the data from secondary sources will be used to contextualize and verify the first ones.

3.2. Economic Dimension

The analysis of this dimension will be, mainly, through primary sources, because there is a large number of economic data. Therefore, we must choose the most representative sources and try to not duplicate information (although sometimes it might be interesting to validate the different sources). Also, is proposed to use some secondary sources to locate in space the main economic activities. In summary, what we will do is:

- Check the commercial register of the city and data from INE and IDESCAT to establish the historical evolution of textil industries at the river.
- Check and compare maps to establish the evolution of the textile industry in the vicinity of the River.

- Check the aerial photographs and orthophotomaps (1950) of the ICC and the Map Library of the Humanities Library (UAB) to establish the evolution of the land uses near the river.

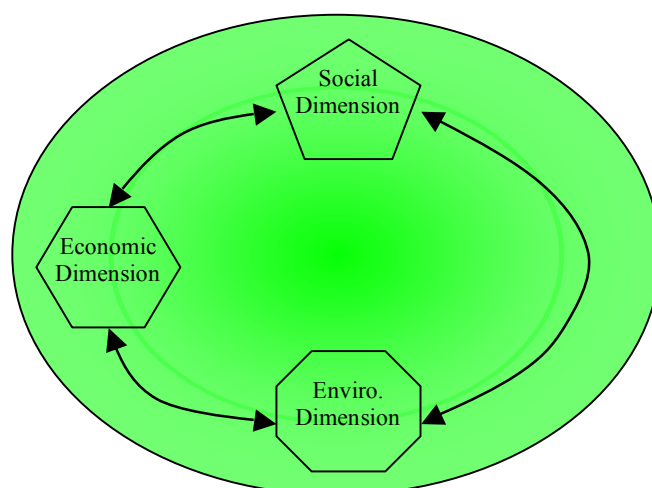
3.3. Environmental Dimension

Assess the environmental impacts of the past can be a difficult task because these were not considered. The lack of specific information about this issue causes us to use indirect information to help us to assess the potential environmental impacts. However, the effects of river dynamics onto population, such as floods and droughts, are well documented in newspapers and municipal archives. Therefore, we propose the following activities to assess the environmental dimension:

- Check the bibliographic sources of the *Arxiu Històric de Sabadell* (newspapers, nature photographs and guides).
- Check newspapers and other informative publications at the archives of the Communication Library (UAB).
- Check the historical data of the ACA to analyze the dynamics of river.
- Check the aerial photographs and orthophotomaps (from 1950) of the ICC and the Map Library of the Humanities Library (UAB) to establish the evolution of land uses near the river.
- Check the improvement environmental plan of the Ripoll River at the PTOPE and archive of the *Diputació of Barcelona*.

4. Expected results

This project aims to find and describe the relations established between the Ripoll River and the inhabitants of Sabadell. What we are looking for is to improve our knowledge about the influence of a natural element, in this case a river, on a human society, and vice versa. That is, what is sought with the realization of this project is to describe the following diagram:



Finally, we would like to develop a memory that serves as reference for future studies at the libraries of Sabadell. It is also appropriate to expose the resulting work in a temporary exhibition at the *Museu d'Història de Sabadell* in one of the rooms intended for such exhibitions.

5. Sources

In this study, the sources will be divided into two categories based on their character. In section 3 we mentioned the main sources that we will use, this section sets out the main places where we can go to find and check the sources.

Primary sources: These include the municipal archives, demographic data, the trade register, newspapers, historical data on river flow, the improvement plans of the river and direct interviews. Therefore, the main sites where we could find them are: *Arxiu Històric de Sabadell* (AHS), *Agència Catalana de l'Aigua* (ACA), *Departament de Política Territorial i Obres Públiques* (PTOP – *Generalitat de Catalunya*), *Registre Mercantil de Sabadell* (*Ajuntament de Sabadell*), *Institut d'Estadística de Catalunya* (IDESCAT), *Instituto Nacional de Estadística* (INE), *Hemeroteca de la UAB* and the residents of the *El Poble Nou* neighborhood.

Secondary sources: These include maps, aerial photographs, nature photographs, novels, stories and guides. The main places where we can find these sources are: *Arxiu Històric de Sabadell* (AHS), *Institut Cartogràfic de Catalunya* (ICC), *Cartoteca General de la UAB* (Humanities Library) and *Unió Excursionista de Sabadell* (UES).