

# *L'acqua: risorsa e minaccia*

*La gestione delle risorse idriche e delle inondazioni in Europa  
(XIV-XIX secolo)*

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a cura di Elisabetta Bini, Diego Carnevale, Domenico Cecere

Federico II University Press



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Università degli Studi di Napoli Federico II  
Clio. Saggi di scienze storiche, archeologiche e storico-artistiche



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# Indice

|   |     |
|---|-----|
| Elisabetta Bini, Diego Carnevale, Domenico Cecere, <i>Introduzione</i>  | 7   |
| Michele Campopiano, <i>Città e risorse idriche: l'acqua come risorsa e come minaccia nella Pianura Padana e nella Valle del Reno (secc. XIV-XVI)</i>        | 21  |
| 1. Colonia  | 28  |
| 2. Reggio nell'Emilia   | 32  |
| 3. Torino   | 35  |
| 4. Strasburgo   | 37  |
| 5. Conclusioni  | 39  |
| Lavinia Maddaluno, « <i>Faire participer le publique de la bonté de la dite eau</i> ». <i>Negotiating urban waters in 17<sup>th</sup>-century Marseille</i> | 41  |
| 1. Drought and power centralisation   | 48  |
| 2. The origin of water in Marseille   | 51  |
| 3. Being a fountaineer in Marseille   | 54  |
| 4. Conclusion   | 60  |
| Gaia Bruno, « <i>Fate voi e fate meglio</i> ». <i>La gestione delle risorse idriche a Palermo in età moderna</i>  | 63  |
| 1. L'approvvigionamento idrico della città  | 68  |
| 2. Gli «antichi possessori» dell'acqua  | 72  |
| 3. Il quadro giuridico: i tanti modi di possedere l'acqua   | 76  |
| 4. Dal XVIII al XIX secolo: la messa in discussione del sistema   | 81  |
| 5. Conclusioni  | 85  |
| Gennaro Varriale, <i>Dangerous waters: Valencia and the Turia floods of the 16<sup>th</sup> century</i>   | 87  |
| 1. The Casa de Murs i Valls   | 90  |
| 2. The Floods   | 97  |
| 3. Conclusion   | 107 |

|  |     |
|--|-----|
| Alfredo Chamorro Esteban, <i>«Todo allí sería perfecto si tuviesen un puerto»: Gestión y prevención del desastre en las costas de Barcelona en época moderna (1570-1640)</i> | 111 |
| 1. Barcelona: situación geográfica i espacio físico  | 112 |
| 2. Proyectos de construcción de un puerto en Barcelona en el siglo XV  | 113 |
| 3. La construcción del puerto de Barcelona en 1590   | 115 |
| 4. Luchar contra temporales e inundaciones: Barcelona durante la Pequeña Edad de Hielo   | 116 |
| 5. La gestión de la catástrofe   | 126 |
| 6. Actuaciones de prevención del gobierno municipal  | 132 |
| 7. Conclusiones  | 136 |
| Diego Carnevale, <i>«Per evitare et prevenire al pericolo che potrebbe succedere». La difesa dalle alluvioni in una metropoli dell'età moderna: Napoli, 1649-1740</i>        | 137 |
| 1. L'«orribile tempesta» del 1727  | 139 |
| 2. Reagire al disastro: tecnici e risorse  | 145 |
| 3. Una politica di prevenzione?  | 150 |
| 4. Conclusioni   | 157 |
| David Gentilcore, <i>«La qualità delle acque». Le risorse idriche nel Regno di Napoli agli inizi dell'Ottocento</i>  | 161 |
| 1. Risorsa. Le acque «per gli usi della vita»  | 164 |
| 2. Risorsa. Le acque della salute  | 173 |
| 3. Minaccia. Le acque come causa di malattia   | 176 |
| 4. Conclusioni   | 183 |
| Michela Lo Feudo, <i>Le crues del 1856 in Francia nei testi e nelle immagini: rappresentazioni di un disastro fra propaganda e strategie di contro-informazione</i>          | 187 |
| 1. Le <i>crues</i> del 1856: un disastro di riferimento nella storia di Francia  | 187 |
| 2. Stampa governativa e narrazione “ufficiale”   | 190 |
| 3. Strategie di contro-informazione: dare voce, e forma, alla catastrofe   | 193 |
| 4. Dall'intervento imperiale alla celebrazione del disastro  | 200 |
| Indice dei nomi  | 205 |



Gennaro Varriale

*Dangerous waters: Valencia and the Turia floods  
of the 16<sup>th</sup> century*

At the end of 2019, the European Environment Agency in Copenhagen published *SOER 2020*, its sixth official report, a voluminous overview of the state of the European Union. As well as highlighting the shortcomings of national governments with respect to their existing commitments, the expert committee outlined how each Member State is addressing the environmental challenges of the coming years. The report notes that Spain and Portugal are the two Member States that will be most affected by periods of aridity in the immediate future, with a real risk of increasing desertification across the Iberian Peninsula. In Spain, the destruction of arable land will lead to an exponential rise in flooding of some 25% over the next fifty years<sup>1</sup>.

Over the last two years, the Iberian Peninsula has in fact seen the worst floods of the century. In the Fall of 2019, heavy rain caused incalculable damage in the areas around Valencia and Murcia. For example, Orihuela, in Alicante, was almost completely isolated for two days in mid-September. The Military Emergencies Unit (UME) was called in, crossing the Segura river to rescue the many people that had been trapped by the waters<sup>2</sup>.

Although torrential rain is in general more frequent and more violent than it has been in the past, it has always been a feature of the coastal areas of the

<sup>1</sup> The report can be downloaded here: <https://www.eea.europa.eu/publications/soer-2020> (consulted 23/01/2023). The author is recipient of the call for grants of the University of Valencia for the requalification of the Spanish university system from the Ministry of Universities of the Government of Spain, financed by the European Union, NextGeneration EU. A part of this research was supported by the DisComPoSE project, which received funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation programme (Grant Agreement No. 759829). Abbreviations used: ACA, Archivo de la Corona de Aragón; AMV, Arxiu Municipal de València; BSM, Biblioteca Serrano Morales.

<sup>2</sup> See, for example, the articles published in «El País» during those tragic days: [https://elpais.com/politica/2019/09/13/actualidad/1568392077\\_152396.html](https://elpais.com/politica/2019/09/13/actualidad/1568392077_152396.html) (consulted 23/01/2023).



Western Mediterranean in Spring and Autumn<sup>3</sup>. Spanish meteorologists use the acronym DANA for such events (Depresión Aislada en Niveles Altos, or “isolated high-altitude depressions”). In popular parlance, they are known as *gota freda* (cold droplet). Archival sources reveal that storms have been violent, devastating and often long-lasting in Valencia. In the Early Modern Period, the greatest danger that persistent rain brings is the river bursting its banks where it flows through the city, and the destruction of crops in surrounding areas.

This river is known today as the Turia, probably derived from the Iberian name Tirio. However, since the times of the Moorish conquests, it has been commonly known as Guadalaviar, from the Arabic *wadi al-abyad* (white river)<sup>4</sup>. In contrast to common belief, the history of Valencia is much more closely tied to the river than to the sea. It was founded in Roman times on what was then a fluvial island in the Turia delta. In the 11<sup>th</sup> century, the Emirs filled in the secondary branch of the river to mitigate against the risk of the city centre being flooded on two sides<sup>5</sup>.

On 14 October 1957, Valencia suffered one of modern Spain's worst catastrophes. The Turia swelled twice in a few short hours and flooded the whole city, causing enormous damage to buildings and people. However, estimates of the damage remain imprecise as a result of censorship by the Franco regime designed to minimise the seriousness of the situation<sup>6</sup>. This was known in the Valencian language as *la gran riuà* (the great flood). The flooding killed at least 81 people and swept away recently-built bridges, while Early Modern and Medieval structures held up against the force of the waters<sup>7</sup>. The most significant consequence of the flooding was the approval of the Plan Sur (the Southern plan), a hydrogeological urban planning programme to divert the course of the last section of

<sup>3</sup> A. Alberola Romá, *Quan la pluja no sap ploure. Sequeres i riudes al País Valencià en l'Edat Moderna*, Valencia, Universitat de València, 2010.

<sup>4</sup> C. Barceló, *Noms aràbics de lloc*, Valencia, Institut Interuniversitari de Filologia Valenciana y Bromera, 2010, pp. 53-54.

<sup>5</sup> F. Almela i Vives, *Las riadas del Turia (1321-1949)*, Valencia, Ayuntamiento de Valencia – Archivo municipal, 1957, pp. 80-93.

<sup>6</sup> See the article published in «La Vanguardia» after the 1959 flood: <http://hemeroteca.lavanguardia.com/preview/1957/10/15/pagina-10/32769770/pdf.html> [last accessed 25-09-2020].

<sup>7</sup> Á. Rodrigo Molina and M. I. Giner García, *La construcción de los paredones y pretiles del río Turia a su paso por la ciudad de Valencia. Historia, puesta en obra, materiales, y levantamiento planimétrico*, in S. Huerta, R. Marín, R. Soler, A. Zaragoza (ed.), *Actas del Sexto Congreso Nacional de Historia de la Construcción*, Madrid, Instituto Juan de Herrera, 2009, pp. 1189-1198.

the Turia, between the municipality of Quart de Poblet and the sea. The area where the river had flowed through built-up areas of Valencia was turned into a park. Where the estuary once was is today a green space and a cultural complex, the Ciutat de les Arts i les Ciències (City of Arts and Sciences), which is one of Valencia's main tourist attractions.

In this paper, we analyse the most serious Turia floods of the 16<sup>th</sup> century, when the Kingdom of Valencia was integrated into the Habsburg Empire. There are two main sections, apart from the introduction and conclusion. The first addresses the history and functions of the body tasked with monitoring the river and the related infrastructure: the Il·lustre Junta de Murs i Valls (Illustrious Council for Walls and Ditches, hereafter the Junta). This Medieval body underwent a major transformation at the end of the 16<sup>th</sup> century when increased rainfall heightened the risk of flooding in Valencia<sup>8</sup>. The second section examines the most serious floods of that century, events that led to lively debate across Valencian society.

We will devote substantial space to primary sources in order to highlight the social and political effects of the floods on 16<sup>th</sup>-century Valencia. The research is primarily based on documents in the city archive, the Arxiu Municipal de València, where the written records of public bodies are preserved, including, in particular, the records of the Junta. The Church was a powerful force in Valencia in those times, so another key reference is the *Libre de Antiquitats* initiated by Pere Martí, the vice-sacristan of the cathedral, and continued by his successors. This is a record of the most significant events that occurred in the city between 1472 and 1783. The original manuscript is preserved in the cathedral archive, the Arxiu de la Catedral de València. We will also focus on sources held at the archive of the Crown of Aragon in Barcelona, the Arxiu de la Corona d'Aragó that document the flow of information on natural disasters between Valencia and the Habsburg court. Accounts written by others who experienced the Turia floods will also be examined, including Gaspar Juan Escolano (1560-1619) and Pere Joan Porcar (1560-1629).

Finally, a further indispensable source is the juriconsult Josep Llop (1630-1685) who, in collaboration with the printer Jeroni Vilagrasa, published a mon-

<sup>8</sup> For a highly detailed doctoral thesis on the Junta, based on Valencia documentation, see V. Meliò Uribe, *La "Fàbrica de Murs i Valls". Estudio de un institución municipal en la Valencia del Antiguo Régimen*, Universitat de València, 1990.

umental work on the Junta in 1675. The work contains the marvellous baroque prints by Francesc Quesádez<sup>9</sup>. Llop was Professor of Greek at the University of Valencia and, after a long career in the law courts of the city and the kingdom, served several years as a lawyer for the Junta. This gave him direct access to its archives.

### 1. *The Casa de Murs i Valls*

On 9 October 1238, King James I the Conqueror (1208-1276) entered Valencia in triumph after a six-month siege. The Crown of Aragon thus definitively conquered the capital after centuries of Moorish control. Just over thirty years later, in 1269, the King ceded responsibility for the management of the city's defences to its new Christian residents, who were required to contribute financially to the maintenance of the walls, irrespective of social background or status<sup>10</sup>. During the reign of Peter IV the Ceremonious (1336-1387), the growing population of Valencia necessitated the restructuring of the 11<sup>th</sup>-century defensive walls, now that parts of the capital were seen as vulnerable. Indeed, the city was at risk not only from the expansionist ambitions of Peter I the Cruel, King of Castile, but also from potential insurrections such as the Guerra de la Unión<sup>11</sup>.

Work on the walls started in 1356, but two years later, on 17 August 1358, the city suffered a devastating flood. This was the first time that the House of Aragon had faced the power of the Turia<sup>12</sup>. A week later, on 24 August, Peter IV issued a decree, a pragmatic sanction, in which he gave his approval for the founding of the Junta in a building which became known two centuries later as the *Fàbrica Vella* (literally "the old workshop," but also responsible for administration and funding). The edict of 4 August 1406, issued by King Martin I the

<sup>9</sup> J. Llop, *De la institució, govern polítich y juridich, observàncies, costums, rentes, obligacions dels oficials de les il·lustres fabriques Vella, dita de Murs e Valls, y Nova dita del Riu, de la insigne, lleal y coronada Ciutat de València*, Valencia, Jeroni Vilagrassa, 1675.

<sup>10</sup> «Acudint del comu de aquella a les reparacions, y adops precissos» (ivi, p. 2).

<sup>11</sup> M. Rodrigo Lizondo, *La Unión valenciana y sus protagonistas*, in «Ligarzas», 7, 1975, pp. 133-166.

<sup>12</sup> The destructive flood of 1358 was the first under the Crown of Aragon that the King himself defined as a "great flood," as noted by Vincente Boix y Ricarte, a key figure of Romanticism in Valencia, in his monumental historical work. Id., *Historia de la Ciudad y Reino de Valencia*, Valencia, Benito Monfort, 1845, p. 442.

Humane (1356-1410), finally clarified the political rights and responsibilities of the body, as the city's elite had long been protesting against the possible loss of their tax exemptions<sup>13</sup>.

The Junta was, therefore, a municipal body with specific functions and prerogatives, and was independent of the local government body, the Consell General (hereafter, the General Council). The General Council had 142 members in 1580: 6 nobles, 4 *ciutadans* (members of the public), 2 scribes, 48 parish representatives and 78 guild representatives<sup>14</sup>. The city's political responsibilities lay with six *jurats* (aldermen), selected by lottery from a list of candidates. The candidate whose name was extracted first became the chairman of the General Council (*jurat en cap*). Over the course of the Early Modern Period, however, the General Council increasingly lost influence with respect to the Consell Secret (Secret Council) consisting only of the six aldermen, the *racional* and the *síndic*, which was a lifetime appointment under the control of the Dasio family<sup>15</sup>.

The Junta, in turn, consisted of the 6 aldermen, the *racional*, the *síndic de la ciutat*, three *obrers* (ecclesiastical, military and royal) and, from 1602, the *obrer canonic del riu* at the head of the body. The body was subject to the control of the Crown, and was therefore free of interference from the municipal or viceregal authorities, at least in theory. In practice, several of its members were also members of local councils. From 1406, by order of Martin I, magistrates were elected every year, a week or two after Christmas, and the members of the Junta were decided by ballot from a list drawn up by the General Council<sup>16</sup>. Magistrates were ineligible for a period of five years following the end of their mandate. The Junta was required to meet at least twice a week, on Tuesdays and Fridays, for two-hour meetings at the palace of the Magnífich Racional or in the golden room of the Generalitat (the most important institution of the Kingdom of Valencia)<sup>17</sup>.

<sup>13</sup> V. Meliò Uribe, *La "Junta de Murs i Valls". Historia de las obras públicas en la Valencia del Antiguo Régimen, siglos XIV-XVIII*, Valencia, Generalitat Valencia – Consell Valencià de Cultura, 1991, p. 40.

<sup>14</sup> A. Santamaría Arández, *El Consell General de Valencia en el tránsito a la modernidad*, Valencia, Biblioteca Valenciana, 2000.

<sup>15</sup> H. Lapeyre, *La Taula de Cambis. En la vida económica de Valencia a mediados del reinado Felipe II*, Valencia, Ed. Del Cenit al Segura, 1982, p. 73.

<sup>16</sup> For further details on the electoral system, see A. Felipe Orts, *Insaculación y élites de poder en la ciudad de Valencia*, Valencia, Edicions Alfons El Magnànim, 1996.

<sup>17</sup> J. Llop, *De la institució*, cit., pp. 25-26.

The work of the Junta was supported by subordinate officials, the two most important ones being the *sotsober* and the scribe (*escrivà de la fàbrica*), who took up their positions in March. The *sotsober* was mainly responsible for financial management, and had to be a notary public resident in Valencia. The scribe was in charge of supervising the works and assisting with the purchase of materials such as wood or stone. The scribe was also responsible for settling the debts of the Junta with its creditors. Financial statements were presented to the *racional* every Saturday. At the end of the year, the *sotsober* presented the accounts to a plenary meeting of the Junta who, in the case of any irregularities, could suspend his salary and require him to pay compensation amounting to double the amount concerned<sup>18</sup>.

The Junta coordinated a range of tasks fundamental to the proper functioning of everyday life in Early Modern Valencia. Above all, they monitored the condition of the defensive structures, including the port area of El Grau. They also monitored the condition of the roads and bridges of the river, and planned any reconstruction and modernisation work that might be necessary. Another key role was managing the distribution network that provided drinking water to the people of Valencia, and the maintenance of the sewers.

As well as managing urban infrastructure, the Junta was responsible for the cathedral clock, which played a key role in the coordination of everyday life in the Early Modern Period. Documents from 1592 record the costs of refurbishing mechanical parts such as «repairing the chain and the pins below the Micalet [the bell tower] in the bell-chamber»<sup>19</sup>. If fire broke out, the Junta organised measures to extinguish it. Fires blazed through the streets of Valencia on more than one occasion, such as on 28 April 1546, when «bells rang out across many parishes, and from the cathedral, because the fire was great. Two or three people died, and only two houses burned down»<sup>20</sup>. In 1591, the *sotsober* awarded 20 *lliures* to Pere Palatios and 25 to Alfons Martines, as they had been seriously injured during

<sup>18</sup> Ivi, pp. 74-75.

<sup>19</sup> « Adobar la cadena y perns que abajo del Micalet, a la caça del rellonje» (AMV, *Libros de Sotsoberia de Muros y Valladares*, d3 – 169, f. 24r, 23/05/1592).

<sup>20</sup> «Tocaren moltes parròchies y la Seu perquè hera molt gran lo foc. Periren dos o tres persones, y cremaren-se sols dos cases». *El Libre de Antiquitats de la Seu de València*, edited by J. Martí Mestre, Valencia-Barcelona, Institut Universitari de Filologia Valenciana. Publicacions de l'Abadia de Montserrat, 1994, p. 183.

the extinguishing of a fire in Carrer dels Manyans: «to pay the doctor and the surgeon that treated two injuries to the head and one to the foot»<sup>21</sup>.

The Junta was also responsible for mounting the public festivities that were usually held in open spaces such as the Plaça del Mercat or the Plaça de Predicadors<sup>22</sup>. Along with other municipal bodies, the Junta was involved in the organisation of events such as jousting, the storming of mock fortresses, bullfights and bull runs. On 20 September 1593, the *sotsobrer* paid the carpenter Gaspar Ravanals a substantial amount for building the barriers «in the market for the bull run»<sup>23</sup>. More than sixty years later, in 1655, a bull run was organised in honour of Saint Roch, the patron saint invoked as protector against the plague that had ravaged the area. The authorities issued an edict announcing that streets and houses would be closed that day where «said bulls will run»<sup>24</sup>.

The Junta was also involved in the planning of royal visits to the city. The most important event to take place in Valencia in the Habsburg period was undoubtedly the wedding of Philip III and Margaret of Austria which, incidentally, was celebrated at the same time as the wedding of Infanta Clara Eugenia, the King's sister, and Albert VII, Archduke of Austria. On 18 April 1599, the bride entered the city on a white horse, riding under a white canopy billowing in the winds of Valencia that swept the future queen into the cathedral, where Philip III awaited her at the throne<sup>25</sup>. More than 400 guests attended the reception at the palace, from where they watched the fireworks that remain, to this day, a key element of local culture. Three days later, the *sotsobrer* was authorised to pay Aloy Domenech for the materials used in the pyrotechnics: «seventy-six exploding rockets, and firecrackers and bangers to celebrate the arrival of the Queen»<sup>26</sup>.

<sup>21</sup> «Per a pagar al metge y cirurgia que lan curat de dos colps del cap y hu del peu» (AMV, *Libros de Sotsobreria de Muros y Valladares*, d3 – 168, s. f., 18/11/1591). For further details on the currency of Valencia, see H. Lapeyre, *La Taula de Cambis*, cit., pp. 54-59.

<sup>22</sup> M. Monteagudo Robledo, *El espectáculo del poder. Fiestas reales en la Valencia moderna*, Valencia, Ajuntament de València, 1995.

<sup>23</sup> «En lo Mercat de la present ciutat en la festa lo corro de bous». AMV, *Libros de Sotsobreria de Muros y Valladares*, d3 – 170, f. 51v, 20/09/1593.

<sup>24</sup> «Correran dits bous» (AMV, *Libros de Pregones o Cridas*, x.x – 5, f. 99r, 1655).

<sup>25</sup> J. Rainer, *Tú, Austria feliz, cástate: La boda de Margarita, princesa de Austria Interior, con el rey Felipe III de España. 1598/99*, in «Investigaciones históricas: Época moderna y contemporània», 25, 2005, pp. 31-54.

<sup>26</sup> «Setenta sis groses de coets boladores y botadores, piules y tronadors, que se han pres per a la venguda de la reyna» (AMV, *Libros de Sotsobreria de Muros y Valladares*, d3 – 174, f. 119v, 21/04/1599).

To finance its operations, the Junta received funds from an indirect tax, or *sis*a, of eleven *diners* on every *cahiz* of grain sold in the Almodín (municipal store) of Valencia. It also relied on other taxes imposed in Valencia and the surrounding areas on the sale of food, and in particular the sale of cereals. However, the revenue generated by these taxes fluctuated greatly, as they were dependent on market conditions and harvests, which were always unstable in the Early Modern Period<sup>27</sup>. To cover its sometimes huge costs, the Junta also made use of the *censal*, a financial instrument in common use across the Crown of Aragon. It allowed the Junta to receive funds from a broad range of creditors to cover expenditure, with these creditors being repaid, with interest, from future tax revenues<sup>28</sup>.

At the end of the 16<sup>th</sup> century, Valencia suffered a dramatic increase in heavy rainfall, frequently torrential, which made the river flood violently<sup>29</sup>. In the 1580s, the Turia burst its banks on several occasions, three of which had catastrophic consequences for the city. In the Summer of 1589, works were underway on the riverbed between Porta del Real and Porta del Mar, but the records of the Junta reveal that «the works cannot continue, because of the high levels of said river»<sup>30</sup>. The Junta found itself in dire financial straits, as the requests to undertake work were continuous as a result of the inclement climate, while the *censal* instrument had left it with burdensome levels of debt<sup>31</sup>.

The viceroy of Valencia, the Marquis of Aitona, sent despatches to the Madrid court requesting «repairs to the damage caused to the city of Valencia by the river bursting its banks»<sup>32</sup>. The king ordered the municipal authorities of Valencia, via the Council of Aragon, to reach an agreement with the different ad-

<sup>27</sup> A. Alberola Romá, *Agricultura, clima y superstición en la España del siglo XVIII: algunas reflexiones del padre Feijoo*, in *Con la razón y la experiencia. Feijoo 250 años después*, edited by I. Urzainqui and R. Olay Valdés, Oviedo, Ediciones Trea, 2016, pp. 21-42.

<sup>28</sup> J. V. García Marsilla, *Vivir a crédito en la Valencia medieval. De los orígenes del sistema censal al endeudamiento del municipio*, Valencia, Universitat de València, 2002.

<sup>29</sup> A. Alberola Romá, *Los cambios climáticos. La Pequeña Edad del Hielo en España*, Madrid, Ediciones Cátedra, 2014.

<sup>30</sup> «Ni's pogue continuar la fahena, per ço que vingue lo dit riu gros» (AMV, *Libros de Sotsoberia de Muros y Valladares*, d3-167, s. f., 01/7/1589).

<sup>31</sup> V. Meliò Uribe, *La "Fàbrica de Murs i Valls" en las postrimerías del siglo XVI. Contribución a su estudio*, in «Estudis: Revista de historia moderna», 13, 1987, pp. 275-280.

<sup>32</sup> «Remedio en el daño que la ciudad de Valencia podía recibir de las crescentes del Rio». ACA, *Consejo De Aragón*, Legajo 651, n. 51/1. The Council of Aragon to Philip II, 24/12/1590.



ministrative levels on how to contain the problem, given «the lamentable damage that the river had caused then, and in the past, affecting more than a thousand houses and drowning a large number of people»<sup>33</sup>.

This led, in 1590, to the creation of the *Fàbrica Nova del Riu* (the new river workshop) with the support of the Crown, the Junta and the General Council. According to the experts that were consulted, the modernisation of the river's infrastructure «could cost between ninety and a hundred thousand *lliures*, which cannot be obtained from or given to said factory as it has debts»<sup>34</sup>. The new body, an arm of the Junta, had a very specific task: managing the river, «with respect only to the works responsible for said river, bridges and banks, which has its own revenues and governance»<sup>35</sup>.

As in the past, the thorniest issue was funding work on the river's infrastructure. In order to be able to commence the work that was urgently required to the damaged banks of the Turia, the General Council decided to impose a tax on meat sold in Valencia and the surrounding areas, the *nova sisa de les carns* (the new meat tax), consisting of «one *diner* on a *lliura* of mutton and one *diner* on a *lliura* of chevon and two *diner* on a *lliura* of ox meat and two *diner* on a *lliura* of beef and two *diner* on a *lliura* of pork whether fresh or salted»<sup>36</sup>.

These tax revenues would in any case not have covered the urgent work that needed to be done on the river structures. The General Council therefore allowed the *Fàbrica Nova del Riu* to generate credit against future tax revenues, using, as before, the *censal* system. On 13 May 1591, the municipal authorities issued an edict, announced by the town crier Honorat Joan Borja to the sound of a bugle, which stipulated that the new tax would be tendered for three years to the highest bidder after an auction at the *Porta de la Llotja*, the commercial centre of

<sup>33</sup> «Las lamentables ruinas que entonzes avia hecho el Río, y en tiempos passados avia tambien executado, cubriendo mas de mil cassas y ahogado gran numero de gente» (AMV, *Varios de Muros y Valladares y Obra Nueva del Río*, o. o. líos 8, s. f. November 1707).

<sup>34</sup> «Pot importar de noranta a cent milia lliures la qual quantitat no's pot haver ni traure de la dita fabrica per estar aquella carregada» (AMV, *Manuals de Consells i Stabliments*, A – 117, ff. 121r-121v, 18/11/1590).

<sup>35</sup> «Destinada solamente para la Fabrica del Río susdicho, Puentes y Paredones que tiene sus rentas y gobierno a parte». AMV, *Varios Líos de Muros y Valladares y Obra Nueva del Río*, o. o. líos 8, s. f. November 1707.

<sup>36</sup> «Un diner per lliura de monto y un diner per lliura de cabro y dos diners per lliura de vedella y dos diners per lliura de bou y dos diners per lliura de carn de porch fresch y salat» (AMV, *Manuals de Consells i Stabliments*, A – 117, f. 122v, 18/11/1590).

Valencia: «by the decision of the General Council on the 18th day of September last that the delegates will go to Llotja to put the new tax out to tender»<sup>37</sup>.

As in the 14th century, the imposition of a new tax outraged the privileged social strata of the city. Church authorities held that they should be exempt from the new tax on meat, and called on the Vatican Curia to defend their interests with respect to the Crown. However, exempting the Church would have made the tax ineffective, as meat consumption was rather limited in the general populace of Early Modern cities<sup>38</sup>.

The dispute between the municipal authorities and the Church went on for several years. The funding shortfall inevitably affected the works that were so essential in the aftermath of the latest Turia floods. In May 1592, the Junta agreed a contract with two experts, Pere Navarro and Hieronimo Negret, to restore the banks of the river between the Our Lady of Good Remedies monastery (since demolished) and the Porta del Mar. In July 1595, however, the works were still at a standstill. Therefore, at the request of the Junta, Hieronimo Variola, doctor of both laws, drew up a new contract with the two experts, having inspected the flood-damaged sites in person to assess the situation: «they all went together to inspect all the works to view all of them well and the parts and locations of said works to see clearly the load borne by said Negret and Navarro»<sup>39</sup>.

Also in July 1595, however, the clergy of Valencia refused to pay the meat tax. With the support of the Bishop of Tortosa, they «obtained a delegation from His Holiness»<sup>40</sup> with the aim of resisting the General Council's authority to impose any kind of tax on the clergy. Philip II therefore wrote to Pope Clement VIII, requesting him to discuss the matter with the King's ambassador in Rome: «with all due respect, I implore Your Holiness to grace me with

<sup>37</sup> «Per deliberacio del consell general celebrat à XVIII del propassat mes de setembre, que ses señories exiran à la lonja de la ciutat pera arrendar dita nova cisa» (AMV, *Libros de Pregones o Cridas*, x. x 2-1, f. 378r. 13/5/1591). On the *arrendamientos* system, see E. Cruselles Gómez, *Las sociedades arrendatarias de los impuestos municipales de Valencia (1410-1450)*, in «Medievalismo», 27, 2017, pp. 133-158.

<sup>38</sup> A. J. Grieco, *Food, Social Politics and the Order of Nature in Renaissance Italy*, Cambridge (Mass.), Harvard University Press, 2020.

<sup>39</sup> «Tots junts haver anat y mirat tota la dita obra per veure molt be tota aquella y les parts de dita obra e los llochs de aquella per veure molt be la obligacio que tenen los dits Negret y Navarro» (AMV, *Libros Obra Nueva del Río*, II-II 3, s.f. 06/07/1595).

<sup>40</sup> «Obtuvieron de Su Santidad una comission» (AMV, *Cartas Reales*, h3 - 6, f. 236v. Philip II to Ambassador Juan Vich y Manrique de Lara, San Lorenzo 26/07/1595).

your approval»<sup>41</sup>. The King then wrote to the Marquis of Denia, viceroy of Valencia, requesting him to assign experts in law to draw up a memorandum outlining the royal and municipal prerogative powers to impose new taxes, so that his ambassador in Rome could defend the King's position with «as much justification as necessary»<sup>42</sup>.

In 1602 the Pope finally agreed to the King's requests, who, however, had died four years earlier. On 25 May, Clement VIII promulgated an apostolic bill requiring the clergy of Valencia to pay the meat tax. However, the Pope was able to obtain two important concessions. The first was a question of jurisdiction: if members of the clergy refused to pay the tax, they could only be tried by an ecclesiastical court. The other increased the influence of the Church in the governance of the Junta. The Council of the Cathedral of Valencia acquired the right to elect one of its members to the Junta, the *obrer canonic del riu*, who had the right to audit payments for works on the Turia<sup>43</sup>.

## 2. *The Floods*

In the 16<sup>th</sup> and 17<sup>th</sup> centuries, Valencia was struck by at least 43 floods, categorised, following local historiographic tradition, as ordinary, extraordinary and catastrophic<sup>44</sup>. The years between 1577 and 1597 were particularly difficult in terms of the frequency and impact of the floods. It is no coincidence that the Crown approved the founding of the Fàbrica Nova in precisely those years. In fact, the Turia bursting its banks became one of the most serious problems faced by Valencia, with its residents regularly having to deal with the destruction caused by the waters<sup>45</sup>.

<sup>41</sup> «Supplico que Vuestra Beatitud que dandole entero credito me haga merced de concederlo» (AMV, *Cartes Reales*, h3 - 6, f. 237r. Philip II to Pope Clement VIII, San Lorenzo 26/07/1595).

<sup>42</sup> «Tan fundamentalmente como es menester» (AMV, *Cartes Reales*, h3 - 6, f. 237v. Philip II to the Marquis of Denia, San Lorenzo 26/07/1595).

<sup>43</sup> J. Llop, *De la institució*, cit., pp. 409-412.

<sup>44</sup> V. Meliò Uribe, *La "Junta de Murs i Valls"*, cit., pp. 36-37.

<sup>45</sup> For a comparative *longue durée* analysis, see G. J. Schenk, *Friend or Foe? Negotiating the Future on the example of Dealing with the rivers Arno and Rhine in the Renaissance (ca. 1300-1600)*, in C. Bianca and F. Salvestrini (ed.), *L'acqua nemica. Fiumi, inondazioni e città storiche dall'antichità al contemporaneo*, Spoleto, Fondazione Centro Italiano di Studi sull'Alto Medioevo, 2017, pp. 137-156.

The flooding of the city by the river was so routine that even the most assiduous Early Modern Period chroniclers devoted few lines to it when it happened. On the cusp of the 17<sup>th</sup> century, Pere Joan Porcar, parish priest of the Church of St Martin, started a diary that became one of the sources most consulted by historians of the period, as it contains more than 3.000 news items about events in the city between 1589 and 1629<sup>46</sup>. Although he cited in great detail the snowfalls and the earthquake of 1598 as exceptional events, there are references to only 4 of the 25 floods that occurred in the period covered, one of which occurred in 1517, more than seventy years before the diary was started. In his account of the flood of 1617, the author refers to earlier floods: «on Friday, 20 October 1589, it came much as this time, but then the banks of the river were not as they are now. And on Wednesday, 16 September 1590, it was again very high, higher than in 1589. And on 27 September 1517, it was extremely high»<sup>47</sup>. In fact, Porcar had only recorded those floods that modern historiography would later classify as catastrophic ones.

The main reason for the increased frequency with which the river flooded the city was a change in the global climate known today as the Little Ice Age (LIA). This affected the northern hemisphere severely, and the particular case of Valencia has been studied in great depth and detail<sup>48</sup>. Between 1570 and 1610, the general lowering of average temperatures had a disastrous effect on agriculture in the Mediterranean areas of the Iberian Peninsula, where the population also had to deal with another endemic meteorological feature: the torrential Spring and Autumn rains<sup>49</sup>. The severe destructive force of the Turia was already evident in the city in the early 16<sup>th</sup> century. The 1517 flood left a desolate landscape in its path:

<sup>46</sup> On the nature of the source, see: F. Andrés Robres, *Interesados creadores de opinión: trazas y piezas de memorialismo justificativo en la temprana producción autobiográfica española (siglos XVI y XVII). Notas para su estudio*, in «Manuscripts», 23, 2005, pp. 59-76.

<sup>47</sup> «Divendres, a 20 de octubre de 1589, vigué casi com esta vegada, pero llavors no y havia les parets al riu com en esta vegà. Y dimecres, a 16 de setembre 1590, tornà a venir grosíssim, més que en lo any 1589. Y a 27 setembre 1517, vingué grosíssim» (P. J. Porcar, *Coses evengudes en la ciutat y regne de València: Dietari (1585-1629)*, edited by J.L. Lozano Lerma, Valencia, Universitat de València, vol. I, p. 469).

<sup>48</sup> A. Alberola Romá, *Clima, desastre y religiosidad en los dietaristas valencianos de los siglos XVI y XVII*, in «Obradoiro de Historia Moderna», 25, 2016, pp. 41-66.

<sup>49</sup> J. Olcina, *El País Valenciano, un territorio de tiempos y climas singulares*, in *Climas y tiempos del País Valenciano*, edited by J. Olcina and E. Moltó, Alicante, Universitat d'Alacant, 2019, pp. 13-18.

«many of the city's houses collapsed and many are on the brink of collapse»<sup>50</sup>. The disaster also had significant political implications. The river burst its banks with great violence on 27 September, the day on which the official despatches regarding the arrival of Charles V in Santander were read in Valencia. The young monarch had made landfall on the Cantabrian coast to take possession of his legacy: the Crowns of Aragon and Castile left by his grandfather, King Ferdinand II of Aragon. In the world view of this religious society, the flood was perhaps interpreted as a divine omen, a premonition of the Revolt of the Brotherhoods.

Almost a century later, the clergyman Gaspar Escolano, a reliable source, recounted the enormous damage caused by the flood, but also focused on the political context of the moment with an explicit reference to the news of the sovereign's imminent arrival. He was a member of the Acadèmia dels Nocturns, and had a degree in theology from the University of Valencia. From 1597 until his death, he was rector of the Church of St Stephen, one of the most important churches of the city. In 1604, Valencia appointed Escolano to the position of official chronicler of the realm, a position that attracted a substantial salary. He enjoyed such fame and standing that, in 1608, he was appointed secretary of the meeting of theologians, glorified in Valencia, whose purpose was to discuss the expulsion of the *moriscos*<sup>51</sup>.

Gaspar Escolano's most important work is the *Decades*, even though its second part is incomplete. It comprises two volumes that analyse the history of Valencia from the Reconquista to the expulsion of the *moriscos*. With respect to the 1517 flood, the author records not only the victims and the religious events organised by the populace but also an episode that was to remain in the collective memory of Early Modern Valencia for a long time: the lion of the Brotherhood, also known as the vespers of St Michael. Memory of this event was still vivid in Valencia at the end of the 17<sup>th</sup> century. For example, Vicente Mares, a man of learning, wrote in his most important work, *La Fenix Troyana*, that as a «portent of the Revolt of the Brotherhoods, this horrendous lion appeared»<sup>52</sup>.

<sup>50</sup> «Moltes cases de la dita ciutat eren caygudes e moltes estaven per caure» (AMV, *Libros de Sotsoberia de Muros y Valladares*, d3 – 100, f. 136v, 28/09/1517).

<sup>51</sup> R. Benítez Sánchez-Blanco, *Heroicas decisiones. La Monarquía Católica y los moriscos valencianos*, Valencia, Institució Alfons el Magnànim, 2001, pp. 363-372.

<sup>52</sup> «Presagio de la Germania, se apareció aquel horrendo Leon» (V. Mares, *La Fenix Troyana: epitome de varias y selectas historias, assi divinas como humanas: Breve resumen de la poblacion del universo. Noticia, y descripcion de toda la tierra. Succinta fundacion de los lugares mas famosos de*

Legend has it that an enormous roaring lion appeared in the city on the night of the great flood, or on the following night according to some reports. The following day, dozens of people confirmed that they had come across the fierce beast in the streets of Valencia. The local authorities considered the possibility that a lion might indeed have escaped from the royal palace amid the confusion caused by the flood<sup>53</sup>. The General Council therefore organised a hunt that lasted three months but produced no results. The rumour spread like wildfire through a society that had been brought to its knees by the flood, and reported sightings of the lion increased day by day in different parts of Valencia. The alarming presence of an elusive lion created a climate of anxiety in the population. In the following century, Escolano described the often brusque exchanges of those months: «those who had seen it were enraged by the doubters, and they came to blows»<sup>54</sup>.

The lion of the Brotherhood was seen for the last time near the Trinitat convent. When the beast reached the bridge of the same name, it leapt into the river, which carried it away from Valencia forever. Escolano saw the appearance of the lion as the sending of an angel, an instrument of divine punishment, but at the same time the learned writer hinted at the possibility that the power of collective suggestion might also have played a role. The three months that followed the flood must have been difficult for this ravaged city as it mourned so many victims. The tale of the elusive lion thus found fertile ground and spread rapidly. The presence of this wild beast almost became a metaphor for the aftermath of the flood, as the city was also going through a period in its history that was marked by a rise in mass hysteria stoked by political and dynastic change<sup>55</sup>.

After the 1517 flood, the waters of the Turia remained benign for many years. However, in early October 1540, the river burst its banks with some force near the Trinitat monastery, one of the most vulnerable areas of the city. It then flooded parts of the city centre, but caused only limited damage. On hearing the news, the bells of the cathedral rang out in a pattern signalling an impending

*España con la sucession de quantos Principes la han dominado; y deleitoso Jardin de Valencianos*, Valencia, Mateo Penen, 1681, Book 4, Chapter 7, p. 114).

<sup>53</sup> Lions were not unusual in the royal palace in 16<sup>th</sup>-century Valencia: ACA, *Consejo de Aragón*, Legajo 644, n 3. Council of Aragon to Philip II, 22-12-1583.

<sup>54</sup> «Los que realmente le avian visto, se enfurecian contra los incredulos, y venian a las manos» (G. Escolano, *Segunda parte de la década primera de la Historia de la insigne, y coronada Ciudad y Reyno de Valencia*, Valencia, Pedro Patricio Mey, 1611, p. 1447).

<sup>55</sup> J. Fuster, *Nosaltres els valencians*, Barcelona, Edicions 62, 1979, p. 63.

storm, to alert the whole population that their help would be needed. The municipal authorities and the members of the Junta rushed to the church. The council decided to organise a procession to carry a crucifix to the Trinitat bridge, where the faithful joined the clergy in prayer, having gathered in large numbers on the banks of the river. The city held its breath for several hours. The danger subsided later that evening, when the procession turned back towards the cathedral: «said procession, on the way out and on the way back, saw the participation of all the *jurats*, the *racional*, and many other officials and many other people»<sup>56</sup>.

Apart from two relatively minor episodes in 1546 and 1555, Valencia suffered no further floods until 1577, which saw the beginning of a dire period of 15 floods in twenty years. At least 4 of these caused extensive damage. The municipal archives, the cathedral sources and the written accounts of the time constitute an exceptional series of testimonies about the violent climatic events that afflicted Valencia over those twenty years. Especially during the Autumn months, Valencia lived in constant fear of the season's characteristically heavy rains causing the river to flood at short notice.

In the Autumn of 1577, the Turia burst its banks twice in just five days. The first occurrence, on Monday 21 October, had tragic consequences. Not only did the flood submerge a significant part of the walled city, killing dozens of people and bringing down some structures, but it also reached the fields around Valencia. On the brink of Winter, this would have led to food shortages. The heavy rains continued, and the Turia burst its banks again on 26 October, albeit causing less damage this time. The General Council had already held an urgent meeting on Wednesday 23 October to decide what immediate action needed to be taken with respect to the flooded fields. They assigned the task of assembling a workforce to the *clavari* (treasurer) Joan de Lamos and the magistrate Bernart Luis Peñarroja. A team of dozens of workers was set up, each paid twenty *lliures* per day to drain the fields and, above all, to repair the damaged windmills: «the waters have destroyed this farmland»<sup>57</sup>.

If the river flooded twice in the Autumn of 1577, once with disastrous consequences for the fields around the city, between 19 and 25 September 1581 it burst

<sup>56</sup> «En dita processó, axí a l'anar com al tornar, y anaven tots los jurats, racional, y moltes altres oficials y molts del poble» (*El Llibre de Antiquitats*, cit., p. 156).

<sup>57</sup> «Aquella horta de aygua sta enrrunada» (AMV, *Manual de Consells i Stabliments*, A-102, f. 274v. 23/10/1577).



its banks four times in a single week. The first flood in particular had catastrophic repercussions: «many buildings were destroyed or ruined, as a result of the size and number of the high waters»<sup>58</sup>. The fields around the city were once again submerged, as well as the municipal grain stores. The population found itself once more on the verge of a long winter without cereal reserves, which inevitably exacerbated social tensions<sup>59</sup>.

The municipal authorities and the viceroy, the Marquis of Aitona, aware of the serious danger looming over the city, organised a range of measures to mitigate the cereal shortage. The Junta was no less active, and by Monday 25 September had allocated the significant sum of 1.050 *lliures* for an essential commercial intervention, «as a result of the damage caused by the river»<sup>60</sup>. The money was to be used to protect a ship loaded with wheat that was due to dock in Valencia four days later, having sailed from Alicante. No-one was willing to run the risk of the ship being boarded by Barbary corsairs<sup>61</sup>.

Over the next few years, the climate of Valencia showed no respite. Not a single drop of rain fell on the city for seven months in 1582/1583. The drought led to meagre low-quality harvests that aggravated the already endemic difficulties in subsistence economies like those of the Early Modern Period. Faced with so complex a situation, the cathedral, several monasteries and most of the churches organised the usual rites, calling on God and the saints to come to the aid of the faithful, «given the need and the length of time without rain, and the ruined land»<sup>62</sup>. However, the rains did not arrive even when Winter was well underway, so the archbishop decided to hold a rather singular procession: the faithful carried the body of Saint Louis of Toulouse, which had been moved to Valencia in 1423 by Alfonso V the Magnanimous following the sack of Marseille, through the streets of the city<sup>63</sup>. Wit-

<sup>58</sup> «Molts edificis y cases se destruïeren y arroïnaron, per les tantes y tan grans aygües» (*El Libre de Antiquitats*, cit., p. 228).

<sup>59</sup> A. Felipo, *Problemas de abastecimiento y política fiscal en la Valencia del siglo XVI*, in «Estudis d'història agrària», 17, 2004, pp. 425-438.

<sup>60</sup> «Causa dels danys que lo riu causava» (AMV, *Manual de Consells i Stabliments*, A-106, f. 179v. 25/9/1581).

<sup>61</sup> On the problem of the Barbary pirate onslaught on the Kingdom of Valencia, see J. F. Pardo Molero, *La defensa del Imperio: política militar en la Valencia de Carlos V*, Valencia, Universitat de València, 2000.

<sup>62</sup> «Vista la necesitat y lo temps ser tan avant y no plovía, y la terra avolutada» (*El Libre de Antiquitats*, cit., p. 231).

<sup>63</sup> P. J. Porcar, *Coses evengudes*, cit., p. 43.

ness accounts record that the famous relic was carried with fervour and veneration through the city, accompanied by most of its population, including the viceroy and the municipal authorities.

At the end of 1584, on the other hand, there were three months of relentless rain that affected farming as much as the drought had: «much of the land remained uncultivated»<sup>64</sup>. The unremitting rainfall was of concern to the municipal authorities in terms of its potential effect on the Turia but, fortunately for the residents of Valencia, the river did not burst its banks that year. The rains finally ceased towards Easter, and the *Te Deum* was sung in the cathedral on Palm Sunday after a long procession through key parts of the city<sup>65</sup>.

Even though the area had been plagued by extreme climatic events such as torrential rain, the Turia did not rise exceptionally even in the critical Autumn period. In fact, after 1581 Valencia did not suffer any flooding for eight years. This period of relative calm enabled the Junta to amass substantial funds. These were used to rebuild the river infrastructure from the Porta del Mar to the Porta del Real, which had been affected severely by previous floods as well as by wear and tear.

In the Summer of 1589, work on the banks of the river was underway. However, eye-witness reports in the Junta archives report a violent flood in the area where work was being undertaken on 21 July. The work was immediately halted as a result<sup>66</sup>. This unusual Summer flood was, in a way, an ominous sign of what Valencia was about to undergo the following Autumn, when incessant rainfall caused one of the city's most devastating floods, again affecting the surrounding farmland: «they pleaded with Their Lordships for help with the great damage caused by the rainfall and the flooding»<sup>67</sup>.

On 20 October 1589, after twelve hours of continuous rain, the waters of the Turia flooded the city, affecting hundreds of people and animals, and bringing

<sup>64</sup> «Restaren moltes terres per sembrar» (*El Libre de Antiquitats*, cit., p. 233).

<sup>65</sup> N. Blaya Estrada and R. Moril Valle, *A dios en el cielo y al hombre en la tierra. La Catedral de Valencia y el ceremonial barroco pro pluva y pro serenitate*, in E. Callado Estela (ed.), *La Catedral Barroca. Iglesia, sociedad y cultura en la València del siglo XVII*, Valencia, Institució Alfons del Magnànim, 2018, vol. I, pp. 289-307.

<sup>66</sup> AMV, *Libros de Sotsobreria de Muros y Valladares*, d3 - 167, s.f., 21/07/1589.

<sup>67</sup> «Han supplicat a ses senyories que fossen servits per lo gran dany que lo diluvi y la venguda del riu han fet» (AMV, *Manuals de Consells i Stabliments*, A-115, f. 243v, 18/11/1589). On the frequency and seasonality of the floods, see J. M. Ruiz, P. Carmona, A. Pérez Cueva, *Flood frequency and seasonality of the Jucar and Turia Mediterranean rivers (Spain) during the "Little Ice Age"*, in «Méditerranée», 122, 2014, pp. 121-130.

down parts of the city walls: «it flooded more than a thousand buildings and drowned a large number of people»<sup>68</sup>. In his diary, Pere Joan Porcar described in great detail the impact of the flood on the city: «it entered through the Porta del Real and reached the Plaça de Predicadors, breaking through a nearby part of the city walls and near the Orto del Real. And the waters reached the walls of the Trinitat, and even to the glass structures of the gardens of Don Berenguer Aguilar»<sup>69</sup>.

To bring the disaster to an end, or at least to stem it, the Junta held an emergency meeting to coordinate rescue operations and other urgent measures. The Junta charged Dionis Tença with sourcing materials for the hardest-hit areas, while Andreu Sirera remained «at the premises of the Junta to provide materials, and spent the whole day in the service of the Fàbrica»<sup>70</sup>. As noted above, the flood of 1589 and the difficult financial circumstances of the Junta were the main motives for the founding of the Fàbrica Nova, with the support of the Crown and the General Council. Debate continued in the city over the following months, often heated between different local bodies, in order to find «an appropriate remedy for current circumstances and to prevent and avoid said damage»<sup>71</sup>.

Less than a year later, on 18 September 1590, the Turia again overwhelmed Valencia, «Our Lord, for our sins, allowed the river to flood again»<sup>72</sup>. This was a very violent flood, affecting large areas of the city and the fields, «leaving the people of Valencia in awe»<sup>73</sup>. The Trinitat monastery, for example, was hit «with such fury that it was impossible to save church ornaments, or stores of grain, wine, oil and other items held there for the coming year and it took everything away, in addition to the damage caused to the walls and foundations»<sup>74</sup>. Similarly, the

<sup>68</sup> «Cubrio mas que mil casas y haogo grande numero de gente» (AMV, *Manuels de Consells i Stabliments*, A – 117, f. 121r, 18/11/1590).

<sup>69</sup> «Entra per lo portal del Real fins a la plaça de Predicadors, que rompé un tros de la muralla del costat del portal y lo cantó de l'ort del Real. Y arribà l'aygua fins a la vora de la pedra de la Trinitat, y fins a les finestres de l'hort de don Berenguer Aguilar» (P. J. Porcar, *Coses evengudes*, cit., p. 50).

<sup>70</sup> «En la casa de Murs y Valls donant ferramenta y ocupanse tot lo dia de servir a la fabrica» (AMV, *Libros de Sotsoberia de Muros y Valladares*, d3 – 167, s.f., 20/10/1589).

<sup>71</sup> «Remedio convenient per al qual effecte y per obviar y scusar dits danys» (AMV, *Manuels de Consells i Stabliments*, A – 117, f. 121r, 18/11/1590).

<sup>72</sup> «Fos nostre senyor servit per nostres pecats de permetre ques seguis altra avenguda del riu» (AMV, *Cartas misivas*, g3 – 56, f. 199r, 21/11/1590).

<sup>73</sup> «Posà en gran admiració a València» (P. J. Porcar, *Coses evengudes*, cit., p. 52).

<sup>74</sup> «Tanta furia, que no pudieron poner encobro los ornamentos de la Iglesia, ni la provision de trigo, vino, azeite y otras cosas que tenían para su año y que assi selo cogio todo, y que el daño

flood left the convent of Our Lady of Good Remedies without food reserves and damaged its foundations, leading the clergy to request financial assistance from the Crown. After assessing the situation, the viceroy sent details to the Council of Aragon, the body in charge of relations between the Kingdom of Valencia and the royal court in Madrid, endorsing the supplication given «the damage caused by the flood and their poverty, and it seems just to grant them a concession of two thousand *ducats*»<sup>75</sup>.

These recent floods served as substantial arguments to the supporters of the meat tax, which would have allowed funding that was not dependent on the Fàbrica Nova. To bolster their position against the protestations of the clergy, the viceroy and the General Council both asked for permission to send Joan Herrera to Madrid with the task of outlining the situation in person to Philip II. The request was endorsed by the Council of Aragon: «as these works are so important and necessary and so that they are done well it would be valuable if Your Majesty were to grant them the mercy they request and permit Juan de Herrera to travel and return with alacrity»<sup>76</sup>. For reasons that are not known, the emissary did not in fact go to Madrid, but the monarch nevertheless emphatically sustained the position of the secular bodies against the protestations of the Church.

The Turia's final 16<sup>th</sup>-century flood was in October 1597, although it was less destructive than earlier ones. The river did burst its banks in several parts of the city the following June, but with little force. The Fàbrica Nova was working at full throttle, and a meeting was held at which the members took a unanimous decision to undertake a number of essential works to the river infrastructure, in particular to the Ponte del Mar, which had suffered severe damage as a result of the most recent floods and general wear and tear: «it will collapse with the next flood»<sup>77</sup>.

After the 1597 flood, the waters of the Turia were placid until at least 1617, which became known as “the year of the flood” because of the continuous

que demas de esto recibieron los cimientos y paredes» (ACA, *Consejo de Aragón*, Legajo 651, n. 51/2. Council of Aragon to Philip II, 4/8/1592).

<sup>75</sup> «Daño rescibido de las crescientes del rio y de su pobreza, y le paresce se les de licencia para dos mil ducados francos» (ACA, *Consejo de Aragón*, Legajo 694, n. 2. Council of Aragon to Philip II, 09/4/1593).

<sup>76</sup> «Por ser esta obra tan importante y necesaria para que se acierte conviene les haga Vuestra Majestad la merced que suplican pues con breuedad puede yr y venir Juan de Herrera» (ACA, *Consejo de Aragón*, Legajo 651, n. 51/1. Council of Aragon to Philip II, 24/12/1590).

<sup>77</sup> «Caygue ab una venguda de riu» (AMV, *Libros Obra Nueva del Rio*, ll II – 6, s.f. 15/6/1598).

rains along the Mediterranean coast of the Iberian Peninsula, and in particular in Catalonia<sup>78</sup>. In fact, the river only broke its banks five times in twenty years, and little damage was caused. Once the authorities and the Church resolved their dispute over the meat tax, the Fàbrica Nova was able to finance essential works to the river infrastructure. On 26 April, a month after the first of the five floods that hit Valencia in 1617, the treasurer administering the meat tax, Gaspar Feo, presented the accounts to the Junta. There were no outstanding debts even though overdue salaries and interest on the *censals* had been paid in full, as had the cost of a number of works, such as «repairs to the banks of a river»<sup>79</sup>.

The significant damage caused by the torrential rains the following Autumn, however, hit the finances of the Junta severely. Eleven years later, Philip IV, concerned about these financial difficulties, ordered Melchor Fisteres, a member of the Real Audiencia (royal court) of the Kingdom of Valencia, to undertake a royal visit. This was immediately opposed by the Junta. However, the King pointed out, in no uncertain terms, «that my royal authority extends both to the new and the old workshop»<sup>80</sup>. The devastating 1617 flood, in conjunction with a general increase in prices and the economic consequences of the expulsion of the *moriscos*, led to a twenty-year chain reaction at the Junta treasury. This led to bankruptcy, and the Junta declared itself insolvent in the face of the pressing demands of its creditors: «it has not been possible to pay the dues on these *censals* since 1637»<sup>81</sup>.

<sup>78</sup> M. Barriendos i Vallvé, *El episodio de precipitaciones intensas de noviembre de 1617 (lo any del diluvi) en la costa mediterránea española*, in F.J. Ayala Carcedo and J. Olcina Cantos (ed.), *Riesgos naturales*, Barcelona, Ariel, 2002, pp. 561-574; G. Parker, *Global Crisis. War, Climate Change and Catastrophe in the Seventeenth Century*, New Haven–London, Yale University Press, 2013, p. 3.

<sup>79</sup> «Reparos dels paredons del riu» (AMV, *Manuals de Consells i Stabliments*, A-143, f. 467v. 26/4/1617).

<sup>80</sup> «Que la dicha mi real comision comprehende ambas fabricas nueva y vieja» (AMV, *Cartes Reales*, h3 - 9, f. 31r. Philip IV to Melchor Fisteres, Madrid 28/3/1628).

<sup>81</sup> «No se han pogut pagar les pensions destos censals desde lo any 1637» (J. Llop, *De la institució*, cit., f. 373).

### 3. Conclusion

God:  
Rain down in floods.  
Let the rains abound  
Until they inundate  
The snows of Etna,  
The fire of Vesuvius.

This is an extract from the aria *Empij mortali, al Creator ribelli* of the oratorio *Il Diluvio Universale*, composer Michelangelo Falvetti, librettist Vincenzo Giattini. The work was premiered in 1682 in Messina, where the composer, originally from Calabria, had recently taken up the role of Master of the Choristers at the cathedral, which he held until 1695. The elaborate structure of Falvetti's work is an exception to the norm of the extant repertoire of 16<sup>th</sup>-century Sicily: 6 principal voices, a chorus of 5 voices, and at least 6 instruments<sup>82</sup>.

The première of *Il Diluvio Universale* took place at a time when Messina was facing enormous problems in the dramatic aftermath of the unsuccessful 1674-1678 rebellion against the Crown<sup>83</sup>. Unlike after the mid-century revolts, the Habsburgs engaged in extremely ferocious repression, which led to the flight of many artists and academics with links of one kind or another to the rebel government<sup>84</sup>. When Falvetti reached Messina from Palermo, he wrote an allegorical opera on the subversive events. The divine punishment on stage is presumably designed to remind the audience of the implacable retribution exacted on the rebels by the Crown.

The failure of the ill-fated revolution (a word with roots in astronomy) is represented in the work as the Great Flood of the Book of Genesis, an established metaphor for flooding in Early Modern Europe<sup>85</sup>. When Gaspar Escolano opens

<sup>82</sup> «Dio: Piovete a diluvij. Le piogge abbondino / Tanto che inondino, / Dell'etnei geli / Gl'ardor de' Vesuvij» (*Il Dilluvio universale. Dialogo posto in musica dal reverendo Sig. D. Michel Angelo Falvetti, maestro della Real Cappella di questa nobile città di Messina [1682]*, edited by F. Longo, Messina, Società Messinese di Storia Patria, 2001, p. 37).

<sup>83</sup> L. Ribot García, *La monarquía de España y la guerra de Mesina (1674-1678)*, Madrid, Actas, 2002.

<sup>84</sup> Id., *Ira regis o clementia. El caso de Mesina y la respuesta a la rebelión en la Monarquía de España*, in B.J García García and A. Álvarez-Ossorio Alvariño (ed.), *Visperas de sucesión. Europa y la Monarquía de Carlos II*, Madrid, Fundación Carlos de Amberes, 2015, pp. 129-157.

<sup>85</sup> R. Fresu, "L'acqua correva con tanto impeto". *La rappresentazione linguistica delle esondazioni nel XVI secolo: primi rilievi*, in «Rhesis. International Journal of Linguistics, Philology, and

his description of the 1517 flood, it is no coincidence that he compares it to the biblical event: «it has been raining continuously in Valencia for some forty days, and it resembled Noah's flood and some hundred buildings have collapsed»<sup>86</sup>. References to the Great Flood endured over time. Even towards the end of the 18<sup>th</sup> century, a *Relación de sucesos* published in Valencia interprets the Turia floods as «another flood sent by Almighty God for your sins»<sup>87</sup>.

Although the words attributed to God in the aria associate the Great Flood with the freezing winters of Mount Etna and the eruptions of Mount Vesuvius, floods are different from other natural disasters. In fact, the residents of flood plains in Early Modern Europe inherited a long tradition, the fruit of a centuries-old relationship with the environment: a culture of flood management. In contrast with how earthquakes and volcanic eruptions are managed, flood defences have become an integral part of the life of societies that live along rivers<sup>88</sup>.

For historians, a significant problem is bias in the sources, as those who witness a flood tend to exaggerate the scale of the disaster that they experienced in person. As our research is based on a single location but covers a whole century, it provides a global view of this type of calamity<sup>89</sup>. Thanks mainly to the serial nature of the archival sources, comparative analysis has revealed the different degrees to which Turia floods have impacted Valencia. The most serious episodes,

Literature», 8, 1, 2017, pp. 5-21. For the role of astronomy in the interpretation of natural disasters see G.J. Schenk, *Dis-astri. Modelli interpretativi delle calamità naturali dal Medioevo al Rinascimento*, in M. Matheus, G. Piccinni, G. Pinto and G. M. Varanini (ed.), *Le calamità ambientali nel tardo medioevo europeo: realtà, percezioni, reazioni*, Firenze, Firenze University Press, 2010, pp. 23-75.

<sup>86</sup> «Llovio en Valencia cerca de quarenta dias continuos, que parecia un retrato del diluvio de Noe y se cayeron cosa de cien casas» (G. Escolano, *Segunda parte de la década primera*, cit., p. 1443).

<sup>87</sup> «Un segundo diluvio que la Magestad Suprema te embia por tus pecados» (BSM, R. 18689. *Relacion nueva, y tragico romance, en que se da cuenta, y declara las notables ruinas que à ocasionado el Rio Turia en la Ciudad de Valencia, desde el año 1357 hasta el de 1776 con sus avenidas de agua*, Valencia, Ramón Castellar, 1777).

<sup>88</sup> C. Rohr, *Floods of the Upper Danube River and its Tributaries and Their Impact on Urban Economies (c. 1350-1600): the Examples of the Towns of Krems/Stein and Wels (Austria)*, in «Environment and History», 19, 2013, pp. 133-148.

<sup>89</sup> See the reflections on this issue by C. Pfister, *Learning from Nature-Induced Disasters. Theoretical Considerations and Case Studies from Western Europe*, in C. Mauch and C. Pfister (ed.), *Natural Disasters, Cultural Response Cases. Studies toward a Global Environmental History*, Lanham, Lexington Books, 2009, pp. 17-40.



such as the 1589 flood, have a “phoenix effect,” as they require river governance to be revisited and renewed following the destruction caused by the waters<sup>90</sup>.

Over the last few years, the DisComPoSE team has worked intensively to identify the socio-political and cultural impact of disasters in Habsburg territories in the Early Modern Period<sup>91</sup>. In an area as diverse as the Hispanic Monarchy, the Crown’s intervention in the management of natural emergencies depends, above all, on how territories were integrated into the political system. Nevertheless, there is a tendency for the dynasty to delegate disaster management to local institutions, in particular during the 16<sup>th</sup> century, for an essentially practical reason: being near a catastrophe enhances the effectiveness of the response<sup>92</sup>.

The Il·lustre Junta de Murs i Valls is not an exception in itself, even though the archive sources and institutional changes of the late 16th century make Valencia and its administrative bodies a prime case for research into the natural disasters of the Hispanic Monarchy. At the same time, the centuries-long history of the Junta validates the axiom that in certain regions of Europe the risk of flooding led to the perfection of a culture of flood management in the Early Modern Period, built on the experiences and results of measures adopted against floods in earlier times. Given its organisational skills and competences in the face of the recurrent flooding of the Turia, the Junta enjoyed such social recognition in Valencia that it is one of the few institutions of the chartered regime to survive the imposition of the radical Nueva Planta decrees of the Bourbons at the beginning of the 18<sup>th</sup> century<sup>93</sup>.

<sup>90</sup> C.L. Dyer, *The Phoenix Effect in Post-Disaster Recovery: An Analysis of the Economic Development Administration’s Culture of Response after Hurricane Andrew*, in S. M. Hoffman and A. Oliver-Smith (ed.), *The Angry Earth: Disaster in Anthropological Perspective*, New York, Routledge, 1999, pp. 278-300.

<sup>91</sup> These are the premisses of the works collected in D. Cecere, C. De Caprio, L. Gianfrancesco and P. Palmieri (ed.), *Disaster Narratives in Early Modern Naples. Politics, Communication and Culture*, Rome, Viella, 2018.

<sup>92</sup> G. Varriale, *D’improvviso un monte nuovo alle porte di Napoli. L’eruzione flegrea del 1538*, in «Studi Storici. Rivista trimestrale dell’Istituto Gramsci», 60, 4, 2019, pp. 781-809.

<sup>93</sup> V. Meliό Uribe, *Transformaciones político-administrative de la “Junta de Murs i Valls” tras la Nueva Planta Borbónica (1707-1788)*, in «Estudis. Revista de historia moderna», 14, 1988, pp. 211-218.

